CHAPTER-VI
CHAPTER - VI

INTEGRATED RURAL DEVELOPMENT PROGRAMME (IRDP) IN KAMRUP DISTRICT - IMPACT OF INCOME AND EMPLOYMENT GENERATION

The District Rural Development Agency, Kamrup was established on 2nd October, 1980 and since then the various poverty alleviation programmes like Integrated Rural Development Programme (IRDP), Training of Rural Youth in Self Employment (TRYSEM), Jawahar Rojgar Yojna (JRY), Development of Women and Children in Rural Areas (DWCRA), Indira Awaas Yojna (IAY), Million Wells Schemes (MWS), Employment Assurance Scheme (EAS) etc. are being implemented by it.

The names of the 17 development blocks indicating population and the distance from the district head quarter are as follows:

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Development Block</th>
<th>Population</th>
<th>Distance from Head Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dimoria Development Block</td>
<td>90287</td>
<td>31 km (approx)</td>
</tr>
<tr>
<td>2</td>
<td>Chandrapur Development Block</td>
<td>39,628</td>
<td>24 kms (approx)</td>
</tr>
<tr>
<td>3</td>
<td>Rani Development Block</td>
<td>65,259</td>
<td>32 kms (approx)</td>
</tr>
<tr>
<td>4</td>
<td>Rampur Development Block</td>
<td>79,089</td>
<td>45 kms (approx)</td>
</tr>
<tr>
<td>5</td>
<td>Chayani Barduar</td>
<td>72,351</td>
<td>48 kms (approx)</td>
</tr>
<tr>
<td>6</td>
<td>Chaygaon Development Block</td>
<td>56,825</td>
<td>58 kms (approx)</td>
</tr>
<tr>
<td>7</td>
<td>Gorimari Development Block</td>
<td>73,825</td>
<td>78 kms (approx)</td>
</tr>
<tr>
<td>8</td>
<td>Bongaon Development Block</td>
<td>32,635</td>
<td>70 kms (approx)</td>
</tr>
<tr>
<td>9</td>
<td>Boko Development Block</td>
<td>86,296</td>
<td>76 kms (approx)</td>
</tr>
<tr>
<td>10</td>
<td>Chamaria Development Block</td>
<td>1,38,461</td>
<td>86 kms (approx)</td>
</tr>
<tr>
<td>11</td>
<td>Hajo Development Block</td>
<td>1,38,461</td>
<td>34 kms (approx)</td>
</tr>
<tr>
<td>12</td>
<td>Sualkuchi Development Block</td>
<td>52,391</td>
<td>33 kms (approx)</td>
</tr>
<tr>
<td>13</td>
<td>Bezera Development Block</td>
<td>65,311</td>
<td>42 kms (approx)</td>
</tr>
<tr>
<td>14</td>
<td>Kamalpur Development Block</td>
<td>73,165</td>
<td>38 kms (approx)</td>
</tr>
<tr>
<td>15</td>
<td>Bihdia Jajikona Dev. Block</td>
<td>88,143</td>
<td>48 kms (approx)</td>
</tr>
<tr>
<td>16</td>
<td>Goreswar Development Block</td>
<td>96,967</td>
<td>70 kms (approx)</td>
</tr>
<tr>
<td>17</td>
<td>Rangia Development Block</td>
<td>1,37,702</td>
<td>56 kms (approx)</td>
</tr>
</tbody>
</table>

In this chapter, we have studied the impact of IRDP on the generation of rural employment and income in Kamrup district. The evaluation of the impact of IRDP assumes importance because shortcomings, if any, in implementation may be rectified on the basis of such studies.
6.1 IRDP - OBJECTIVES AND HYPOTHESES OF THE STUDY

The following are the major objectives of our study relating to IRDP.

i) To assess the working of IRDP in Kamrup district in the state of Assam and to examine various dimensions of the programme with special emphasis on employment and income generation;

ii) To study the impact of IRDP on economic conditions of the beneficiaries;

iii) To examine the post credit aspects, including utilisation and maintenance of assets, recovery performance and forward and backward linkages;

iv) To explore and explain the difficulties in the implementation of the programme and to suggest suitable measures.

In order to fulfil the above objectives the following hypotheses have been formulated for testing:

i) There is no significant difference in the socio-economic status of the beneficiaries in terms of income and asset position vis-à-vis, there is significant difference in the socio-economic status;

ii) The programme has no significant impact on employment generation vis-à-vis it has significant impact on employment generation;

iii) The repayment performance of the beneficiaries is not satisfactory vis-à-vis it is satisfactory;

iv) The loans and subsidies given to the beneficiaries are not sufficient vis-à-vis they are sufficient.

6.2 REASON FOR SELECTING KAMRUP DISTRICT

Kamrup district is selected for the present study for the following reasons:

i) Kamrup district is one of the flood-affected areas of the State.

ii) The levels of living, it is said, are comparatively low to many other regions of the State.

iii) The incidence of poverty is higher than the other regions.

Studying the impact of IRDP on rural employment and income generation in such a district would not only be interesting but also illuminating. Moreover, studying only one district would be manageable for an individual researcher due to time and financial constraints. Again, being an
inhabitant of this district, I am comparatively more familiar with the social, cultural and economic conditions of this area.

6.3 SELECTION OF THE SAMPLE
The selection of the sample units for the study has been made using two-stage stratified random sampling method. In the first stage, blocks and in the second stage, beneficiary households have been selected by applying simple random sampling (without replacement) technique. As per DRDA (Kamrup) study, the blocks in Kamrup district have been categorised as developed, moderately developed and less developed on the basis of some chosen economic indicators. We have selected blocks for our study from all the three categories. We have selected Dimoria block from developed blocks, Sualkuchi block from moderately developed blocks and Boko block and Hajo block from less developed blocks. On the whole, 230 beneficiaries (10 per cent of the total) from the list of IRDP beneficiaries have been selected at random. The sample beneficiary households consist of 97 from Dimoria block, 69 from Sualkuchi block, 42 from Boko and 40 from Hajo block. The sectorwise beneficiary households are as follows: 93 households from agricultural sector, 67 households from animal husbandry sector and 70 households from Industry Services and Business (ISB) Sector.

6.4 REFERENCE PERIOD
As the study aims at analysing the impact of IRDP in the reference period (i.e. the period which is being compared), it is felt that the reference period selected should be such that it would allow sufficient time for the programme to have its full impact on the economic conditions of the sample beneficiaries. Considering this, the reference period has been taken as 1998-99. The respondents who obtained the assistance during 1996-97 had been selected. A field survey of the sample blocks revealed that actual growing of the schemes took place either at the end of the year 1996-97 or at the beginning of 1997-98, due to either the late approval of the field level household surveys or delayed release of funds. Further, it has been realized that the schemes started yielding income only during 1997-98. Therefore, the year 1996-97 has been selected as the base year for IRDP incomes and the year 1998-99 has been taken as the reference year to assess the post IRDP income and employment.
6.5 COLLECTION OF DATA

The study is based on both primary and secondary data. The primary data from the sample households has been collected through a schedule, specially designed for the purpose. In view of non-maintenance of records of incomes, the survey was conducted twice, first during 1997 to collect pre-IRDP information and later during 1999 to collect post IRDP information. Informal discussions have also been undertaken with the beneficiaries during the course of collection of data. Sufficient cross checkings have been made during the personal interviews to ensure reliability and accuracy of the data. The secondary data have been collected from District Rural Development Agency, Kamrup, as well as from the administrative offices of the blocks and District Planning office.

To understand the various aspects of implementation of the Integrated Rural Development Programme, the officials at various levels were interviewed. Among the district officials, the respondents interviewed were DRDA Project Officer, Assistant Project Officers(APOs), sectoral Heads and Technical Officer from Department of Agriculture, Animal Husbandry, Industry(District Industries Centre), Co-operatives, Social Welfare and Social Forestry and Planning. At block level along with BDO, all extension officers and Village Development Officers(VDOs) were interviewed. The respondents selected from banking organisations were Lead Bank Officer, Technical Officers in the lead bank and the branch managers of concerned banks operating in the sample blocks.

A number of publications of the State Government, Reserve Bank of India, National Institute of Rural Development, Hyderabad and Guwahati; Indian Institute of Entrepreneurship, Guwahati; State Institute of Rural Development, Guwahati; have been extensively consulted in the course of the research work.

6.6 TOOLS OF ANALYSIS

To test the hypotheses of the study the following statistical tools such as percentages, ratios, graphs/diagrams have been used. Added to this Sen's Index Model, Gini Co-efficient of variations techniques have also been employed. The following statistical techniques have also been applied.

i) **Paired t test**: To compare the variations in generation of income, employment creation and asset creation of the beneficiaries under the various
schemes in the three sectors i.e. Agriculture, Animal husbandry and Industries Services and Business(ISB) financed by different financial institutions between the base year and post project year; paired t test is employed. The formula is:

\[ t = \frac{d}{s/\sqrt{n-1}} \sim t_{n-1} \]

Where, \( d = x - y \), \( x \) and \( y \) represent respectively the pre and post values of the characteristic under study

\[ \overline{d} = \frac{\sum d}{n} \]

\[ s^2 = \frac{1}{n} \sum [d^2 - (\overline{d})^2] \]

i) **Regression Analysis** : To study the impact of investment on increase in income and employment of the beneficiary families under various schemes in the three sectors, regression technique is employed. The regression model is

\[ y = a + bx \]

where, \( y \) = incremental income,

\( x \) = investment,

\( a \) = the intercept,

\( b \) = elasticity co-efficient (Regression co-efficient)

ii) **Head count ratio** : This is also called the poverty index (\( H \)) which is defined as \( \frac{n_p}{n} \), where \( n_p \) is the people below the poverty line and ‘\( n \)’ is the total number of people.

iii) **Income Gap or Poverty Gap (PG)** : This measures the degree of poverty by the shortfall of all the poor’s incomes from the poverty line.

\[ PG = \sum (Z - I_i) \]

where \( Z \) is the poverty line and \( I_i \) is the income of the \( i \)th individual.

iv) **Sen’s P-Measure** : This measure takes into account not only the percentage of population in poverty but also the gap between the poverty line and the average consumption of the poor as well as the extent of inequality among the poor. The formula for ‘\( P \)’ measure is:

\[ P = \frac{Z}{(q+1)n.z} \sum (Z-Y_i)(q+1-i) \]
Where $P$ = Sen's measure of poverty

\( n \) = size of population

\( y_i \) = income of the \( i \)th individual arranged in the ascending order of magnitude of income,

\( q \) = number of people below the poverty line,

\( Z \) = minimum acceptable level of income of the poverty line.

6.7 LIMITATIONS OF THE STUDY

The scope of this study has been limited to four selected sample blocks in Kamrup district and the sample beneficiary households from four blocks due to constraints in respect of time and resources of an individual researcher. The data for the present study have been collected through personal interview method. Since the beneficiary households don’t maintain proper accounts, and most of them are illiterate, there is possibility of bias and hence the data collected may only be an approximation of facts. However, efforts have been made to collect reasonably satisfactory information from the sample respondents by repeated appeal and persuasion.

6.8 CONCEPTS USED

The following concepts are used in the present study.

i) Large Farmer: A cultivator with a landholding of above 2.5 acres of wet land or 5 acres of dry land,

ii) Small Farmer: A cultivator with a landholding up to 2.5 acres of wet land or 5 acres of dry land,

iii) Marginal farmer: A cultivator with a landholding up to 1.25 acres of wet land or 2.5 acres of dry land,

iv) Agricultural Labourer: A person without any land other than homestead and deriving more than 50 per cent of his income from agricultural wages,

v) Non-agricultural wages: A person whose total income from wage earning sources other than agriculture does not exceed Rs.200 per month,

vi) Rural Artisan: A rural artisan is defined as a person who belongs to a family, which has been traditionally engaged in rural crafts such as pottery, carpentry, weaving, black-smith, cane-making etc.
6.9 PERFORMANCE OF IRDP IN KAMRUP DISTRICT

The main aim of the IRDP in the district like other areas in the country is to raise the level of living of the poorest families in the rural areas above the poverty line and to create substantial additional employment opportunities in the rural sector. Since 2nd Oct, 1980 IRDP continues to be a major instrument of poverty alleviation in the rural areas, based on the principle of fixing targets on selectivity and incidence of poverty.

The IRDP in the district aims at providing self-employment opportunity to rural poor through assistance in the form of subsidy and bank credit to enable the individual as well as groups to acquire productive assets and appropriate skills to cross the poverty line on a sustained basis. Beneficiaries are generally selected by holding Gram Sabha in the Panchayat elakas periodically.

Table-6.1 shows the progress made by the programme in achieving the target. The achievement in the year 1985-86, 1986-87, 1988-89, 1989-90, 1990-91, 1992-93, 1995-96, 1997-98 exceeded the target, while in the other years i.e. from 1981-82 to 1998-99 the achievements were less than the target. This has been also shown graphically in Fig-6.1.

<table>
<thead>
<tr>
<th>SN</th>
<th>Year</th>
<th>Target</th>
<th>Achievement</th>
<th>Short(-) Excess(+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>1981-82</td>
<td>-</td>
<td>3052</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>1982-83</td>
<td>-</td>
<td>3569</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>1983-84</td>
<td>-</td>
<td>3030</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>1984-85</td>
<td>-</td>
<td>3029</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>1985-86</td>
<td>4756</td>
<td>5812(120.20)</td>
<td>+1056</td>
</tr>
<tr>
<td>6</td>
<td>1986-87</td>
<td>4312</td>
<td>4961(115.05)</td>
<td>+649</td>
</tr>
<tr>
<td>7</td>
<td>1987-88</td>
<td>3672</td>
<td>2798(76.20)</td>
<td>-874</td>
</tr>
<tr>
<td>8</td>
<td>1988-89</td>
<td>4968</td>
<td>5301(106.70)</td>
<td>+333</td>
</tr>
<tr>
<td>9</td>
<td>1989-90</td>
<td>4842</td>
<td>5985(123.61)</td>
<td>+1143</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>1990-91</td>
<td>4005</td>
<td>4232(105.67)</td>
<td>+227</td>
</tr>
<tr>
<td>11</td>
<td>1991-92</td>
<td>3388</td>
<td>3238(95.57)</td>
<td>-150</td>
</tr>
</tbody>
</table>
The financial targets and achievements of IRDP in the district are shown in the table-6.2. Table shows that the financial assistance (in terms of subsidy) has not exceeded the targeted amounts in almost all the years except in the year 1988-89. In the year 1987-88 the target and achievement were the same. Table-6.2 is graphically shown in Fig-6.2.

Table-6.2 : Financial Assistance (Subsidy) under IRDP in Kamrup District-
Targets and Achievements from 1981-82 to 1998-99

<table>
<thead>
<tr>
<th>SN</th>
<th>Year</th>
<th>Target</th>
<th>Achievement</th>
<th>Short(-)</th>
<th>Excess(+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1981-82</td>
<td>42.26</td>
<td>26.98</td>
<td>-15.28</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1982-83</td>
<td>60.23</td>
<td>58.16</td>
<td>-2.07</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1983-84</td>
<td>60.88</td>
<td>46.89</td>
<td>-13.99</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1984-85</td>
<td>64.84</td>
<td>37.22</td>
<td>-27.62</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1985-86</td>
<td>167.94</td>
<td>100.22</td>
<td>-67.72</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1986-87</td>
<td>169.20</td>
<td>107.83</td>
<td>-61.37</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1987-88</td>
<td>106.00</td>
<td>106.00</td>
<td>Balanced</td>
<td></td>
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<td>8</td>
<td>1988-89</td>
<td>117.69</td>
<td>123.53</td>
<td>+5.84</td>
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<tr>
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<td>1989-90</td>
<td>194.21</td>
<td>141.36</td>
<td>-52.85</td>
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<tr>
<td>10</td>
<td>1990-91</td>
<td>173.92</td>
<td>98.43</td>
<td>-75.49</td>
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</tr>
<tr>
<td>11</td>
<td>1991-92</td>
<td>158.82</td>
<td>84.23</td>
<td>-74.59</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1992-93</td>
<td>192.84</td>
<td>91.53</td>
<td>-101.31</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1993-94</td>
<td>211.71</td>
<td>96.05</td>
<td>-115.66</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1994-95</td>
<td>251.85</td>
<td>135.09</td>
<td>-116.76</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1995-96</td>
<td>376.33</td>
<td>150.52</td>
<td>-225.81</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1996-97</td>
<td>278.85</td>
<td>174.68</td>
<td>-104.17</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1997-98</td>
<td>397.98</td>
<td>184.12</td>
<td>-213.86</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1998-99</td>
<td>469.98</td>
<td>277.87</td>
<td>-192.11</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled from DRDA, IRDP records, Kamrup district.
Fig. 5.1 shows the number of families assisted under IRDP in Kamrup District from 1981-82 to 1998-99. It shows that except in a few years the achievements exceeded the targets.

- Target
- Achievement
Fig : 6.2 shows the targets and achievements of financial assistance to the beneficiaries under IRDP in Kamrup District from 1981-82 to 1998-99. It shows that in almost all the years the achievements could not reach the targets.

- Target
- Achievement
The table-6.3 shows the average financial assistance (subsidy) given to the identified families yearwise during the period.

It appears from the table-6.3 that the average financial assistance in the form of subsidy given to a family varied considerably from year to year throughout the period. The conclusion that emerges from this picture is that the total subsidy released by DRDA on year to year basis had no relation whatsoever with the number of families actively assisted.

Table - 6.3 : Average Financial Assistance (Subsidy) under IRDP in Kamrup District per assisted family

<table>
<thead>
<tr>
<th>SN</th>
<th>Year</th>
<th>No. of families assisted</th>
<th>Total Financial assistance (subsidy) in Lakhs.</th>
<th>Per Family Financial (subsidy) assistance Rs.(3/2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1981-82</td>
<td>3052</td>
<td>26.98</td>
<td>8840.00</td>
</tr>
<tr>
<td>2</td>
<td>1982-83</td>
<td>3569</td>
<td>58.16</td>
<td>1629.50</td>
</tr>
<tr>
<td>3</td>
<td>1983-84</td>
<td>3030</td>
<td>46.89</td>
<td>1547.52</td>
</tr>
<tr>
<td>4</td>
<td>1984-85</td>
<td>3029</td>
<td>37.22</td>
<td>1228.79</td>
</tr>
<tr>
<td>5</td>
<td>1985-86</td>
<td>5812</td>
<td>100.22</td>
<td>1724.36</td>
</tr>
<tr>
<td>6</td>
<td>1986-87</td>
<td>4961</td>
<td>107.83</td>
<td>2173.55</td>
</tr>
<tr>
<td>7</td>
<td>1987-88</td>
<td>2798</td>
<td>106.00</td>
<td>3788.42</td>
</tr>
<tr>
<td>8</td>
<td>1988-89</td>
<td>5301</td>
<td>123.53</td>
<td>2330.32</td>
</tr>
<tr>
<td>9</td>
<td>1989-90</td>
<td>5985</td>
<td>141.36</td>
<td>2361.90</td>
</tr>
<tr>
<td>10</td>
<td>1990-91</td>
<td>4232</td>
<td>98.43</td>
<td>2325.85</td>
</tr>
<tr>
<td>11</td>
<td>1991-92</td>
<td>3238</td>
<td>84.23</td>
<td>2601.30</td>
</tr>
<tr>
<td>12</td>
<td>1992-93</td>
<td>2985</td>
<td>91.53</td>
<td>3066.33</td>
</tr>
<tr>
<td>13</td>
<td>1993-94</td>
<td>4151</td>
<td>96.05</td>
<td>2313.90</td>
</tr>
<tr>
<td>14</td>
<td>1994-95</td>
<td>4289</td>
<td>135.09</td>
<td>3149.69</td>
</tr>
<tr>
<td>15</td>
<td>1995-96</td>
<td>4129</td>
<td>150.52</td>
<td>3645.43</td>
</tr>
<tr>
<td>16</td>
<td>1996-97</td>
<td>3481</td>
<td>174.68</td>
<td>5,018.98</td>
</tr>
<tr>
<td>17</td>
<td>1997-98</td>
<td>4201</td>
<td>184.12</td>
<td>4,382.77</td>
</tr>
<tr>
<td>18</td>
<td>1998-99</td>
<td>4792</td>
<td>277.87</td>
<td>5,798.62</td>
</tr>
</tbody>
</table>

Source: Compiled from DRDA, Kamrup, IRDP records. Table 6.1 and 6.2

The year 1981-82 shows the highest amount of assistance provided per family in the district but thereafter it falls sharply to the lowest Rs.1228.79 in the year 1984-85 and goes up to Rs.5798.62 in the year 1988-99.

Table-6.4 contains information to the coverage of SC/ST families under IRDP in the district during the period 1981-82 to 1998-99.
It can be seen from the table-6.4 that, in all the years, out of the total beneficiary families the coverage of SC/ST could not exceed the target of 30 per cent. However, the target was exceeded in the years 1985-86, 1986-87, 1987-88, 1988-89, 1990-91, 1992-93, and 1996-97.


<table>
<thead>
<tr>
<th>SN</th>
<th>Year</th>
<th>Total Families</th>
<th>SC Families</th>
<th>ST Families</th>
<th>Total SC and ST Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1981-82</td>
<td>3052</td>
<td>24(.8)</td>
<td>402(13.17)</td>
<td>426(13.96)</td>
</tr>
<tr>
<td>2</td>
<td>1982-83</td>
<td>3569</td>
<td>243(6.18)</td>
<td>821 (23.00)</td>
<td>1064 (29.18)</td>
</tr>
<tr>
<td>3</td>
<td>1983-84</td>
<td>3030</td>
<td>248(8.19)</td>
<td>501 (16.53)</td>
<td>749 (24.72)</td>
</tr>
<tr>
<td>4</td>
<td>1984-85</td>
<td>3029</td>
<td>324(10.70)</td>
<td>4690 (15.48)</td>
<td>1793 (26.18)</td>
</tr>
<tr>
<td>5</td>
<td>1985-86</td>
<td>5812</td>
<td>836 (14.38)</td>
<td>2570 (44.22)</td>
<td>3406 (58.60)</td>
</tr>
<tr>
<td>6</td>
<td>1986-87</td>
<td>4961</td>
<td>856 (17.25)</td>
<td>935 (18.85)</td>
<td>1791 (36.10)</td>
</tr>
<tr>
<td>7</td>
<td>1987-88</td>
<td>2798</td>
<td>225 (8.05)</td>
<td>922 (32.95)</td>
<td>1147 (41.00)</td>
</tr>
<tr>
<td>8</td>
<td>1988-89</td>
<td>5301</td>
<td>594 (11.21)</td>
<td>1092 (20.60)</td>
<td>1686 (31.81)</td>
</tr>
<tr>
<td>9</td>
<td>1989-90</td>
<td>5985</td>
<td>488 (8.16)</td>
<td>1266 (21.15)</td>
<td>1754 (29.31)</td>
</tr>
<tr>
<td>10</td>
<td>1990-91</td>
<td>4232</td>
<td>421 (9.95)</td>
<td>988 (23.35)</td>
<td>1409 (33.39)</td>
</tr>
<tr>
<td>11</td>
<td>1991-92</td>
<td>3238</td>
<td>318 (9.82)</td>
<td>642 (19.83)</td>
<td>960 (29.65)</td>
</tr>
<tr>
<td>12</td>
<td>1992-93</td>
<td>2985</td>
<td>342 (11.46)</td>
<td>789 (26.43)</td>
<td>1131 (37.89)</td>
</tr>
<tr>
<td>13</td>
<td>1993-94</td>
<td>4151</td>
<td>386 (9.54)</td>
<td>822 (19.80)</td>
<td>1218 (29.34)</td>
</tr>
<tr>
<td>14</td>
<td>1994-95</td>
<td>4289</td>
<td>394 (9.20)</td>
<td>856 (19.96)</td>
<td>1250 (29.16)</td>
</tr>
<tr>
<td>15</td>
<td>1995-96</td>
<td>4129</td>
<td>349 (8.45)</td>
<td>808 (19.57)</td>
<td>1157 (28.02)</td>
</tr>
<tr>
<td>16</td>
<td>1996-97</td>
<td>3481</td>
<td>413 (11.86)</td>
<td>912 (26.20)</td>
<td>1325 (38.06)</td>
</tr>
<tr>
<td>17</td>
<td>1997-98</td>
<td>4201</td>
<td>378 (9.00)</td>
<td>824 (19.61)</td>
<td>1202 (28.61)</td>
</tr>
<tr>
<td>18</td>
<td>1998-99</td>
<td>4792</td>
<td>400 (8.34)</td>
<td>1031 (21.52)</td>
<td>1431 (29.86)</td>
</tr>
</tbody>
</table>

Source: Compiled from DRDA, IRDP records
Note : Figures in brackets denote percentages to total families

However, SC/ST families, which are the most vulnerable sections of the society and the poorest of the poor have received attention, as the percentage of coverage in other years also was very near to the target except in the year 1981-82.

Sectorwise Performance

Table-6.5 shows the sector-wise performance in the Kamrup district from 1982-83 to 1998-99 in the three sectors - Primary, Secondary and Tertiary. From the table it is clear that in the primary sector, the performance
steeply fell from 70.33 per cent in the year 1982-83 to 46.60 per cent in the next year. But it again started rising from the year 1988-89 to 1991-92 and then fell from the year 1992-93 to 1998-99, in which it became 32.98 per cent. Sectorwise performance of IRDP in Kamrup district has also been shown graphically in Fig-6.3.

Table : 6.5 : Sectorwise number of beneficiaries Assisted during 1982-83 to 1998-99

<table>
<thead>
<tr>
<th>SN</th>
<th>Year</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1982-83</td>
<td>2510 (70.33)</td>
<td>571 (15.99)</td>
<td>488 (13.68)</td>
<td>3569 (100.00)</td>
</tr>
<tr>
<td>2</td>
<td>1983-84</td>
<td>1443 (47.64)</td>
<td>1298 (42.84)</td>
<td>289 (9.52)</td>
<td>3030 (100.00)</td>
</tr>
<tr>
<td>3</td>
<td>1984-85</td>
<td>1412 (46.60)</td>
<td>1360 (44.92)</td>
<td>257 (8.48)</td>
<td>3029 (100.00)</td>
</tr>
<tr>
<td>4</td>
<td>1985-86</td>
<td>2092 (36.00)</td>
<td>3231 (55.59)</td>
<td>489 (8.41)</td>
<td>5812 (100.00)</td>
</tr>
<tr>
<td>5</td>
<td>1986-87</td>
<td>2264 (45.63)</td>
<td>2220 (44.75)</td>
<td>477 (9.62)</td>
<td>4961 (100.00)</td>
</tr>
<tr>
<td>6</td>
<td>1987-88</td>
<td>1268 (45.31)</td>
<td>1227 (43.86)</td>
<td>303 (10.83)</td>
<td>2798 (100.00)</td>
</tr>
<tr>
<td>7</td>
<td>1988-89</td>
<td>3266 (61.62)</td>
<td>1352 (25.50)</td>
<td>683 (12.88)</td>
<td>5301 (100.00)</td>
</tr>
<tr>
<td>8</td>
<td>1989-90</td>
<td>3737 (62.44)</td>
<td>1396 (23.32)</td>
<td>852 (14.24)</td>
<td>5985 (100.00)</td>
</tr>
<tr>
<td>9</td>
<td>1990-91</td>
<td>2872 (67.86)</td>
<td>613 (14.50)</td>
<td>747 (17.64)</td>
<td>4232 (100.00)</td>
</tr>
<tr>
<td>10</td>
<td>1991-92</td>
<td>2206 (68.12)</td>
<td>496 (15.34)</td>
<td>536 (16.54)</td>
<td>3238 (100.00)</td>
</tr>
<tr>
<td>11</td>
<td>1992-93</td>
<td>1832 (61.38)</td>
<td>655 (21.94)</td>
<td>498 (16.68)</td>
<td>2985 (100.00)</td>
</tr>
<tr>
<td>12</td>
<td>1993-94</td>
<td>2253 (54.28)</td>
<td>1160 (27.94)</td>
<td>738 (17.78)</td>
<td>4151 (100.00)</td>
</tr>
<tr>
<td>13</td>
<td>1994-95</td>
<td>2268 (52.87)</td>
<td>755 (17.62)</td>
<td>1266 (29.51)</td>
<td>4289 (100.00)</td>
</tr>
<tr>
<td>14</td>
<td>1995-96</td>
<td>1896 (45.91)</td>
<td>945 (22.88)</td>
<td>1288 (31.21)</td>
<td>4129 (100.00)</td>
</tr>
<tr>
<td>15</td>
<td>1996-97</td>
<td>1401 (40.24)</td>
<td>669 (19.22)</td>
<td>1411 (40.54)</td>
<td>3481 (100.00)</td>
</tr>
<tr>
<td>16</td>
<td>1997-98</td>
<td>1353 (32.20)</td>
<td>659 (15.69)</td>
<td>2189 (52.11)</td>
<td>4201 (100.00)</td>
</tr>
<tr>
<td>17</td>
<td>1998-99</td>
<td>1578 (32.93)</td>
<td>829 (17.30)</td>
<td>2385 (49.77)</td>
<td>4792 (100.00)</td>
</tr>
</tbody>
</table>

Source : Compiled from DRDA, IRDP records Kamrup District
Note : Figures in brackets denote percentages to total.
One graph is required as sectorwise achievement in corresponding years.

Percentage to the total assisted families in the tertiary sector it rises from 13.68 in the year 1982-83 to 49.77 in the year 1998-99.

In the secondary sector, the performance was more or less same except in the early years where the percentage of performance went up to 55.59 per cent in the year 1985-86 and then it fell. Thereafter it varied in between 15 per cent to 26 per cent, between 1988-89 to 1998-99.
Fig : 6.3 shows the sectorwise beneficiaries in terms of Primary, Secondary and Tertiary during 1982-83 to 1998-99 in Kamrup District. In all these sectors, the figures are erratic ones.
6.10 RECOVERY PERFORMANCE

Recovery of the loans is important since satisfactory repayment helps in recycling of funds. The beneficiaries have to be educated and motivated about the importance of regular payment of installments according to payment schedule. Unfortunately, the cells which have been constituted for the recovery of dues and over dues, seemed to be not quite effective. The recovery cells are not properly streamlined. The over dues of IRDP advances are increasing and thereby the recycling of funds is becoming more and more difficult. Reserve Bank of India has desired that the total over dues should not be more than 10 per cent outstanding, whereas in the district over dues are more than 40 per cent of outstanding. If both banks and government officials make joint efforts, the over dues may be decreased. A stage has come when a systematic drive and massive campaign should be launched to effectively bring home to the rural community the imperative need for repayment of bank loans in time and develop general consciousness of ethics and culture.

Table : 6.6 : Bank-Wise Allocation of IRDP during year 1995-96 in Kamrup District.

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Bank</th>
<th>Credit Target (in lakh.)</th>
<th>Proposal Sponsored</th>
<th>Disbursed (in lakh.)</th>
<th>No.-of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Credit</td>
<td>Subsidy</td>
<td>Bank Credit</td>
</tr>
<tr>
<td>1</td>
<td>Pragjyotish Gaonlia Bank (RRB)</td>
<td>120.62</td>
<td>2511</td>
<td>163.22</td>
<td>55.64</td>
</tr>
<tr>
<td>2</td>
<td>UCO Bank</td>
<td>57.68</td>
<td>1428</td>
<td>92.84</td>
<td>23.30</td>
</tr>
<tr>
<td>3</td>
<td>State Bank of India</td>
<td>48.72</td>
<td>796</td>
<td>51.79</td>
<td>8.00</td>
</tr>
<tr>
<td>4</td>
<td>Central Bank of India</td>
<td>72.04</td>
<td>1671</td>
<td>108.62</td>
<td>17.86</td>
</tr>
<tr>
<td>5</td>
<td>Punjab National Bank</td>
<td>33.50</td>
<td>729</td>
<td>47.39</td>
<td>14.86</td>
</tr>
<tr>
<td>6</td>
<td>United Bank of India</td>
<td>28.86</td>
<td>637</td>
<td>41.44</td>
<td>6.80</td>
</tr>
<tr>
<td>7</td>
<td>Allahabad Bank</td>
<td>27.66</td>
<td>570</td>
<td>37.10</td>
<td>13.60</td>
</tr>
<tr>
<td>8</td>
<td>Union Bank</td>
<td>6.84</td>
<td>171</td>
<td>11.16</td>
<td>1.30</td>
</tr>
</tbody>
</table>
Table-6.7 shows the Annual Credit Plan in the Kamrup district from 1998-99 to 1999-2000 in different sectors.

**Table : 6.7 : Annual Credit Plan for the years 1998-99 and 1999-2000 in Kamrup District and Credit Deposit ratio**

<table>
<thead>
<tr>
<th>S N</th>
<th>Year</th>
<th>Agriculture and allied</th>
<th>Small scale industry</th>
<th>Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td>Achieve ment</td>
<td>Target</td>
<td>Achieve ment</td>
</tr>
<tr>
<td>1</td>
<td>1998-99</td>
<td>12416</td>
<td>467 (37.8)</td>
<td>1418</td>
<td>966 (60.1)</td>
</tr>
<tr>
<td>2</td>
<td>1999-2000</td>
<td>1221</td>
<td>585.6 (47.9)</td>
<td>1599</td>
<td>865 (54.1)</td>
</tr>
</tbody>
</table>

Source: Annual Credit Plan, 2001-2002, under services Area Approach, UCO Bank, Lead Bank Department, Kamrup District.

Note: Figures in brackets indicates percentages of achievement to target.

The table-6.7 indicates that service sector receives priority than the agriculture and small scale industry sectors.

There are 142 numbers of Commercial Bank branches, 13 numbers of Co-operative Bank branches and 21 numbers of Regional Rural Bank branches (Pragjyotish Gaonolia Bank). Altogether 176 branches are operating in the district to offer credit to the beneficiaries.

### 6.11 ECONOMIC IMPACT OF IRDP ON BENEFICIARIES

The economic impact of IRDP assistance on beneficiaries in Kamrup district has been evaluated mainly on three fronts:

i) Socio-economic profile of beneficiary households,

ii) The economic impact of IRDP assistance on beneficiary households in terms of income generation and employment generation and
iii) To examine in detail the various aspects of loan repayment performance of beneficiaries.

**Socio-Economic Profile of Beneficiaries**

The impact of any developmental programme depends upon the socio-economic background of the respondents. Hence the discussion of the socio-economic background of the beneficiaries is an integral part of any sociological study. A brief discussion on these aspects would throw useful light on the implementation of the IRDP, since the assistance under IRDP is to be given to the poorest among the poor. Proper identification of households is an important exercise to be done carefully. Since the selected families mostly belong to the weaker sections of the society such as small and marginal farmers, agricultural labours, rural artisans and SC and STs, details of sample beneficiaries in terms of their social status are provided here. Sectionwise, Schemewise, and Castewise classifications of sample beneficiaries are also provided. The details relating to the socio-economic profile presented in tabular form will enable one to assess whether the identification of beneficiaries is proper or otherwise and the schemes entrusted to beneficiaries are suitable or not to their experience, ability, education etc.

**Size of the Families**

The IRDP takes a family and not an individual as unit for assistance and a family is regarded as consisting of 5 members. The size of the family acquires importance as it determines the size of income required for its livelihood. A large family needs more financial assistance to create work for all the adult members and thereby cross the poverty line. Further, the repayment of loans by a big family to financial institutions will not be prompt as the additional income generated will be more often used for consumption propose. It is, therefore, appropriate to study the size of the sample beneficiary families.

The distributor of beneficiary families according to the size has been presented in table-6.8. It can be seen that 62.17 per cent of the families have five and below, while 8.26 per cent of the families have more than 8 members. The percentage of SC and ST families having more than 5 members per family...
is greater compared to the families of the other castes. It supports the view that poorer families tend to have large members.

Table : 6.8 : Size of Sample Households, Castewise

<table>
<thead>
<tr>
<th>SN</th>
<th>Description</th>
<th>Normal (1 to 5 members)</th>
<th>Large (6 to 7 members)</th>
<th>Very Large (8 members and above)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scheduled Caste</td>
<td>56 (62.22)</td>
<td>29 (32.22)</td>
<td>5 (5.56)</td>
<td>90 (100.00)</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>10 (43.48)</td>
<td>12 (52.17)</td>
<td>1 (4.35)</td>
<td>23 (100.00)</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>77 (65.81)</td>
<td>27 (23.08)</td>
<td>13 (11.11)</td>
<td>117 (100.00)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>143 (62.17)</td>
<td>68 (29.57)</td>
<td>19 (8.26)</td>
<td>230 (100.00)</td>
</tr>
</tbody>
</table>

Source : Field survey.
Note : Figures in brackets denote percentage of total.

Age and sex composition of a family determines the earning members and dependency load. Children below 14 year and old people above 60 years are supposed to be dependent members. If the percentage of dependent members in the family is more, the family finds it difficult to cross the poverty line. In table-6.9 the age and sex composition of sample families is represented. It can be seen from the table that the 230 families have a total population of 1240 of which 628 are males and 612 are females. Regarding the age composition of the total population 331 people (26.69 per cent) are below 14 years of age and 35 people (2.82 per cent) are above 60 years. The dependency load in economic terminology thus works out to be 29.51 per cent. It means that 874 people (70.49 per cent) are to be considered as economically active population. But it may be noted that in poor families, children and old people often tend to work to enhance the family income.

Table : 6.9 : Age and Sex-wise Classification of Sample Households.

<table>
<thead>
<tr>
<th>SN</th>
<th>Age-Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No of Persons</td>
<td>Percentage to total</td>
<td>No of Person</td>
<td>Percentage to total</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>Below 14</td>
<td>171</td>
<td>27.23</td>
<td>166</td>
</tr>
<tr>
<td>2</td>
<td>15-19</td>
<td>446</td>
<td>71.02</td>
<td>428</td>
</tr>
<tr>
<td>3</td>
<td>60 and above</td>
<td>11</td>
<td>1.75</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>628</td>
<td>100.00</td>
<td>612</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source : Field survey.
Educational Status

A minimum level of education is absolutely essential for the active participation of rural people in the development programme. In fact, education is one of the most essential inputs of the rural development process. It has been found that there is a high degree of correlation between the level of education and productivity even among the rural people. For adoption of new techniques of production, rural masses must be educated. By education, we can remove ignorance, superstition and disinclination to accept change. In the selection of projects, in obtaining subsidies and bank loans and for the management and maintenance of assets, the level of education of the family members plays a crucial role. The educational status of the members of beneficiary families are presented in table-6.10.

Table-6.10 : Education status of the sample Households

<table>
<thead>
<tr>
<th>SN</th>
<th>Educational Status</th>
<th>Scheduled Caste</th>
<th>Scheduled Tribes</th>
<th>Other Castes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>Illiterate</td>
<td>208(49.29)</td>
<td>64(58.18)</td>
<td>190(33.27)</td>
<td>462(41.89)</td>
</tr>
<tr>
<td>2</td>
<td>Literate</td>
<td>135(31.99)</td>
<td>32(29.09)</td>
<td>103(18.04)</td>
<td>270(24.48)</td>
</tr>
<tr>
<td>3</td>
<td>Primary</td>
<td>41(9.72)</td>
<td>8(7.27)</td>
<td>173(30.30)</td>
<td>222(20.13)</td>
</tr>
<tr>
<td>4</td>
<td>Secondary</td>
<td>32(7.58)</td>
<td>5(4.55)</td>
<td>83(14.53)</td>
<td>120(10.88)</td>
</tr>
<tr>
<td>5</td>
<td>Vocational/Technical</td>
<td>1(0.24)</td>
<td>-</td>
<td>3(0.53)</td>
<td>4(0.36)</td>
</tr>
<tr>
<td>6</td>
<td>College/University</td>
<td>5(1.18)</td>
<td>1(0.91)</td>
<td>19(3.33)</td>
<td>25(2.25)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>422(100.00)</td>
<td>110(100.00)</td>
<td>571(100.00)</td>
<td>1103(100.00)</td>
</tr>
</tbody>
</table>

Note: Person above 5 years alone were considered, Figures in brackets denotes percentage to total.

It can be observed from the table-6.10 that out of the total population of 1103 (above 5 years of age), 462 persons(41.89 per cent) are totally illiterate. It may be noted that 24.48 per cent are just literate (know reading and writing), 20.13 per cent received primary education, 10.88 per cent secondary education, 0.36 per cent vocational/technical education and 2.26 per cent college/university education. It can also be seen from the table that STs occupy the lowest position in the educational status. The percentage of illiteracy is most pronounces in respect of ST followed by SC.
Occupation and Social Status

The target groups for poverty alleviation under IRDP consists of small and marginal farmers, agricultural and non-agricultural labours, rural artisan and socially and economically backward castes like SCs and STs. These groups are considered to be more poor but the poorest among these families are to be given priority for assistance. In table-6.11 the classification of sample beneficiaries by occupation and castewise is shown.

Table - 6.11 : Occupational and social status of the beneficiaries.

<table>
<thead>
<tr>
<th>SL</th>
<th>Category</th>
<th>Scheduled Castes</th>
<th>Scheduled Tribes</th>
<th>Other Castes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Large Farmers</td>
<td>-</td>
<td>-</td>
<td>3(2.56)</td>
<td>3(1.30)</td>
</tr>
<tr>
<td>2</td>
<td>Small Farmers</td>
<td>4(4.44)</td>
<td>3(13.04)</td>
<td>18(15.38)</td>
<td>25(10.87)</td>
</tr>
<tr>
<td>3</td>
<td>Marginal Farmers</td>
<td>21(23.34)</td>
<td>6(26.08)</td>
<td>42(35.90)</td>
<td>69(30.00)</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural Labours</td>
<td>54(60.00)</td>
<td>10(43.38)</td>
<td>13(11.11)</td>
<td>77(33.48)</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural Labours</td>
<td>9(10.00)</td>
<td>2(8.70)</td>
<td>30(25.64)</td>
<td>41(17.83)</td>
</tr>
<tr>
<td>6</td>
<td>Rural artisans</td>
<td>2(2.22)</td>
<td>2(8.70)</td>
<td>11(9.41)</td>
<td>15(6.52)</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>90 (100.00)</td>
<td>23 (100.00)</td>
<td>117 (100.00)</td>
<td>230 (100.00)</td>
</tr>
</tbody>
</table>

Source: Field Survey.
Note: Figures in brackets denote percentage to total.

It can be seen from the table that out of 230 sample families, 113 families belong to SCs and STs. If we eliminate the three households of large farmers belonging to other castes who have topped the list in respect of income, the number of SC and ST families is almost equal to the families of other castes in the sample. Considering their percentage in total population, we may say that a lion’s share went to SC and ST families.

The occupationwise classification of the beneficiaries was done on the basis of total income from farm and non-farm sources. When an individual gets more than half of his/her total income from a particular source, he/she was categorised in that occupation. It can be seen from the table-6.11 that out of 230 sample families 69 families (30 per cent) belong to marginal farmers. Agricultural and non-agricultural labourers constitute more than 50 per cent. It is, therefore, heartening to note that a large number of families belong to that social group who own no productive assets. Families belonging to the natural artisans figured insignificantly (6.52 per cent) in the sample.
On the other hand very few large farmers have been able to manage to get assistance.

**Land Ownership**

The data relating to the land ownership of the sample beneficiaries are important for several reasons. Firstly, agricultural income depends on the size of the land holding and also on whether the land is irrigated or unirrigated. Secondly, in the matter of disbursement of subsidy and loans the land ownership status is taken into account. Marginal farmers, who own one acre of irrigated or 2.5 acres of unirrigated land are given 33.3 per cent subsidy and the small farmers who own 2.5 acres of irrigated or 5 acres of unirrigated land are given 25 per cent subsidy. Thirdly, in the process of selection of beneficiaries, land holding pattern is also taken into consideration. Since land is the main source of income, it would be better to know the land distribution pattern of the beneficiaries. Table-6.12 shows the land distribution pattern of the beneficiary households.

**Table 6.12 : Land Group-Wise Distribution of Sample beneficiaries Households (1996-97)**

<table>
<thead>
<tr>
<th>SN</th>
<th>Land Holding Group (acres)</th>
<th>Number of sample beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Land Less</td>
<td>78 (33.91)</td>
</tr>
<tr>
<td>2</td>
<td>0.01-1.00</td>
<td>62 (26.96)</td>
</tr>
<tr>
<td>3</td>
<td>1.01-2.00</td>
<td>57 (24.79)</td>
</tr>
<tr>
<td>4</td>
<td>2.01-3.00</td>
<td>18 (07.83)</td>
</tr>
<tr>
<td>5</td>
<td>3.01-4.00</td>
<td>07 (03.04)</td>
</tr>
<tr>
<td>6</td>
<td>4.01-5.00</td>
<td>05 (02.17)</td>
</tr>
<tr>
<td>7</td>
<td>Above 5.00</td>
<td>03 (01.30)</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>230 (100.00)</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey.

Table-6.12 reveals that 152 out of 230 sample beneficiary households are possessing land. About 51.75 per cent of the beneficiaries who have land holdings below 2 acres. This shows that majority of the beneficiaries are economically weak. The type and extent of land possessed by the sample households is presented in table-6.13, it can be seen from the table that 152 sample households put together possess 235.12 acres of net operational land and the net operational holding per beneficiary household works out to be 332...
1.55 acres. It may be noted that unirrigated area of 155.58 acres accounts for 66.17 per cent of total land holdings. Families financed under agricultural sector possess, on the average, more land than the beneficiaries in the other two sectors.

Table-6.13 : Sector wise Land Holding of Sample Beneficiary Households (1996-97).

<table>
<thead>
<tr>
<th>SN</th>
<th>Sector</th>
<th>No. of beneficiary households</th>
<th>No. of beneficiaries Possessed Land</th>
<th>Irrigated (in acres)</th>
<th>Unirrigated (in acres)</th>
<th>Total (in acres)</th>
<th>Average net area per sample beneficiary household</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>93</td>
<td>80</td>
<td>56.10 (36.96)</td>
<td>95.70 (63.04)</td>
<td>151.80 (100.00)</td>
<td>1.90</td>
</tr>
<tr>
<td>2</td>
<td>Animal husbandry</td>
<td>67</td>
<td>50</td>
<td>15.90 (26.51)</td>
<td>44.08 (73.49)</td>
<td>59.98 (100.00)</td>
<td>1.20</td>
</tr>
<tr>
<td>3</td>
<td>ISB</td>
<td>70</td>
<td>22</td>
<td>7.54 (32.31)</td>
<td>15.80 (67.69)</td>
<td>23.34 (100.00)</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>230</td>
<td>152</td>
<td>79.54 (33.83)</td>
<td>155.58 (66.17)</td>
<td>235.12 (100.00)</td>
<td>1.55</td>
</tr>
</tbody>
</table>

Source: Field survey.
Note: Figures in brackets do not percentage to total.

**Type of Houses**

A house no doubt provides shelter, but its type indicates the economic and social status of the people. The poverty levels are reflected at the type of houses owned by the families. It may be observed from table-6.14 that only 9.57 per cent of the families do own houses, which may be considered as pucca.

By personal observation, it has been found that even the so-called pucca house donot provide enough accommodation to all the family members. They are pucca in the sense that they donot collapse to the furies of nature. Kutch house and hut dwellers account for nearly 75 per cent of the sample households.

Table-6.14 : Classification of sample beneficiaries as per type of House

<table>
<thead>
<tr>
<th>SN</th>
<th>Type of House</th>
<th>Agriculture</th>
<th>Animal Husbandry</th>
<th>ISB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hut</td>
<td>27(29.03)</td>
<td>24(35.82)</td>
<td>24(34.29)</td>
<td>75(32.61)</td>
</tr>
<tr>
<td>2</td>
<td>Kutch</td>
<td>40(43.01)</td>
<td>27(40.30)</td>
<td>29(41.43)</td>
<td>96(41.74)</td>
</tr>
<tr>
<td>3</td>
<td>Semi-Pucca</td>
<td>16(17.21)</td>
<td>9(13.43)</td>
<td>11(15.71)</td>
<td>36(15.65)</td>
</tr>
</tbody>
</table>
Income Levels of Beneficiaries in the Base Year

As per guidelines issued by the Ministry of Rural Development, Government of India, the beneficiary families were classified into five categories on the basis of their income in the base year 1996-97. Families having an annual income of less than Rs.3500 are to the assisted first. The classification is presented in the table-6.15. A look into the data reveals that out of 230 families, 211 families (91.74 per cent) are well below poverty line (Rs.6400) and 182 families (79.13 per cent) are below cut off income level of Rs.4800 which has been defined in chapter-V. It may be noted that 19 assisted families are having an income over the poverty level of Rs.6400 per annum and 29 families are earning more than Rs.4800 per annum although they are below the poverty line. It means that there is a wrong identification to the extent of 48 families (20.87 per cent).

However, it is observed that considering the size in the total population in Kamrup district, SC and ST families have been shown preference in providing project assistance. Wrong identification is much less in the case of SC and ST families. Out of 113 families, only 11 families in our sample were not eligible for assistance as per IRDP guideline.

Table-6.15 : Income Levels of the Sample Beneficiaries in the Base year(1966-67) castewise

<table>
<thead>
<tr>
<th>SN</th>
<th>Range of Family Annual Income (In Rs.)</th>
<th>No. of Sample beneficiaries</th>
<th>Scheduled Castes</th>
<th>Scheduled Tribes</th>
<th>Other Castes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-2265 (Destitutes)</td>
<td>33(14.35)</td>
<td>12(13.33)</td>
<td>5(21.74)</td>
<td>16(13.68)</td>
</tr>
<tr>
<td>2</td>
<td>2266-3500 (Very Very Poor)</td>
<td>50(21.74)</td>
<td>24(26.67)</td>
<td>5(21.74)</td>
<td>21(17.95)</td>
</tr>
<tr>
<td>3</td>
<td>3501-4800 (Very Poor)</td>
<td>99(43.04)</td>
<td>47(52.23)</td>
<td>9(39.13)</td>
<td>43(36.75)</td>
</tr>
<tr>
<td>4</td>
<td>4801 (Poor)</td>
<td>29(12.61)</td>
<td>4(4.44)</td>
<td>1(4.35)</td>
<td>24(20.51)</td>
</tr>
</tbody>
</table>
The wrong identification is much more in the case of other castes. Out of 117 families assisted, 37 families were ineligible, as they were having an annual income of more than Rs.4800.

**Economic Impact of IRDP on Beneficiaries**

The economic impact of IRDP assistance on beneficiaries in the Kamrup district is analysed in detail on the basis of a sample. The economic impact is measured on the basis of the increase in family income due to the financial assistance given to each family. The assistance is given to a family to acquire a productive asset, which creates adequate employment and thereby generate the required income to enable the family to cross the poverty line. But, when assistance is given as per IRDP guidelines to the poorest of the poor families on priority basis, there may be improvements in family income but those families may not be able to cross the poverty line. Thus when families in a lower income group (for example destitutes) move into a higher income group the impact is said to be favorable. Such upward shift of families from lower income to higher income groups is also presented here. An attempt here is also made to assess the impact of various schemes on generation of additional employment to beneficiary families. Income generation under IRDP schemes ultimately depends upon the types and quality of the assets acquired with the assistance and maintenance of such assets. It may happen in some cases that the beneficiaries by adopting fraudulent practice may not obtain the productive assets or may not maintain such assets though the beneficiaries initially acquired these with the scheme assistance. The creation of employment and generation of income depend on a number of factors such as the experience of the family in the project, the infrastructural facilities, the quality of the asset, the maintenance of the asset and the management capabilities of the family.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6401 and above (Respondents above Poverty line)</td>
<td>19(8.26)</td>
<td>3(3.33)</td>
<td>3(13.04)</td>
<td>13(11.11)</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>90</td>
<td>23</td>
<td>117</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey.
Financial Assistance

Under IRDP, identified beneficiaries are assisted with economically viable schemes by creating assets with the help of subsidy from the government and credit from the financial institutions.

Block-wise financial assistance given to the sample beneficiaries is presented in the table-6.16. It is observed from table-6.16 that a total amount of Rs.35.39 lakh was disbursed for the sample beneficiaries in the four selected blocks of Kamrup district. The total financial assistance comprise of Rs.12.77 lakh (36.08 per cent) disbursed as subsidy and Rs.22.62 lakh (63.92 per cent) given as bank loan. In Dimoria block 79 received financial assistance to the tune of Rs.7.61 lakh, which accounts for 21.50 per cent of the total assistance. In Shualkuchi block 69 beneficiaries received Rs.12.44 lakh (35.15 per cent of the total assistance), 42 beneficiaries in Boko block accounting Rs.9.85 lakh (27.83 per cent of the total assistance) and 40 in Hajo block amounting to Rs.5.49 lakh (15.52 per cent of the total assistance).

Table-6.16 : Total Financial assistance to IRDP beneficiaries Blockwise

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Block</th>
<th>No. of Sample Beneficiaries</th>
<th>Subsidy</th>
<th>Bank Loan</th>
<th>Total assistance</th>
<th>Percentage to total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dimoria</td>
<td>79</td>
<td>2.94</td>
<td>4.67</td>
<td>7.61</td>
<td>21.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(38.63)</td>
<td>(61.37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sualkuchi</td>
<td>69</td>
<td>3.04</td>
<td>9.40</td>
<td>12.44</td>
<td>35.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(24.44)</td>
<td>(75.56)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Boko</td>
<td>42</td>
<td>4.79</td>
<td>5.06</td>
<td>9.85</td>
<td>27.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(48.62)</td>
<td>(51.38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hajo</td>
<td>40</td>
<td>2.00</td>
<td>3.49</td>
<td>5.49</td>
<td>15.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(36.43)</td>
<td>(63.57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>230</td>
<td>12.77</td>
<td>22.62</td>
<td>35.39</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(36.08)</td>
<td>(63.92)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey.
Note: Figures in bracket denote percentage to total

Financial assistance given by the Commercial Banks, Regional Rural Bank and Co-operative Banks to the sample beneficiary households is shown in the table-6.17.
Table-6.17 : Distribution of Financial Assistance Bankwise to the sample beneficiaries (in lakhs)

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of the Bank</th>
<th>No. of Sample beneficiaries</th>
<th>Subsidy</th>
<th>Bank Loan</th>
<th>Total assistance</th>
<th>Percentage to total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commercial Banks</td>
<td>112</td>
<td>6.22</td>
<td>11.02</td>
<td>17.24</td>
<td>48.71</td>
</tr>
<tr>
<td>2</td>
<td>Regional Rural Banks</td>
<td>71</td>
<td>3.94</td>
<td>6.98</td>
<td>10.92</td>
<td>30.86</td>
</tr>
<tr>
<td>3</td>
<td>Co-operative Banks</td>
<td>47</td>
<td>2.61</td>
<td>4.62</td>
<td>7.23</td>
<td>20.43</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>230</td>
<td>12.77</td>
<td>22.62</td>
<td>35.39</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Field survey.

Table-6.17 shows the Commercial Banks provided assistance to 112 beneficiaries, Regional Rural Banks to 71 beneficiaries and Co-operative Banks to 47 beneficiaries. Of the total assistance, Commercial Banks providing 48.71 per cent ranks first in financing of IRDP in the selected areas, Regional Rural Banks occupy the second place (30.86 per cent) and Co-operative Banks rank third (20.43 per cent). The average assistance per household works out to be Rs.15387. The average assistance per household provided by Commercial Banks works out to Rs.15393 while it is Rs.15380 and Rs.15383 respectively in case of Regional Rural Banks and Co-operative Banks.

Classification of Beneficiaries

Before making detailed analysis of the impact of IRDP assistance, the sectorwise, schemewise, castewise and occupationwise classification of some beneficiaries is presented. These details are indicated in the table-6.18. Table shows the distribution of 230 sample families among the various schemes. It can be seen from the upper portion of the table-6.18 (upto subtitle D) castewise and schemewise distribution of beneficiary households. The SC and ST families preferred schemes such as plough bullocks in agricultural sector and schemes under animal husbandry sector. Only 18 out of 90 Scheduled Caste families and 6 out of 23 Scheduled Tribe families opted schemes under ISB Sector. In the castes other than SC and ST, it is observed that out of 117 sample families, 51 families preferred Schemes in the agricultural sector with sericulture being the most prominent one and 46 families opted schemes under ISB sector.
A look at the lower portion of the table (from subtitle E) shows that small and marginal farmers are given schemes in the animal husbandry sector. It is seen from the table that a large number of families belonging to the rural artisans and non-agricultural labourers preferred schemes in the ISB sector.

Before analysing the impact of financial assistance on income generation, it is considered desirable to present data relating to the average financial assistance (subsidy and bank loan) given to each family schemewise, occupationwise and castewise. All types of economically viable schemes pertaining to different sectors can be provided to the beneficiaries under IRDP. However, all the sectors are not given equal importance. In table-6.19 data relating to financial assistance given to beneficiary families sectorwise and schemewise are presented. Of the total assistance, agricultural sector accounts for 38.52 per cent, animal husbandry for 30.04 per cent and ISB sector 31.44 per cent. The average financial assistance for agricultural sector works out to be Rs.14657 per beneficiary household, Rs.15865 per beneficiary for animal husbandry sector and Rs.15893 per beneficiary household engaged in the ISB sector.
Table-6.18: Classification of sample beneficiaries.

<table>
<thead>
<tr>
<th>Caste/Catgory</th>
<th>No. of Sample Beneficiary</th>
<th>Plough bullock</th>
<th>Sericulture</th>
<th>Power Tiller/ Pump set</th>
<th>Sub Total</th>
<th>Milk animal</th>
<th>Sheep rearing</th>
<th>Cattle rearing</th>
<th>Sub Total</th>
<th>Petty Shop</th>
<th>Weaving</th>
<th>Tailoring</th>
<th>Carpestry</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>90 (39.13)</td>
<td>25 (6.45)</td>
<td>2 (21.42)</td>
<td>33 (35.48)</td>
<td>15 (57.69)</td>
<td>16 (57.14)</td>
<td>8 (61.54)</td>
<td>39 (58.21)</td>
<td>6 (27.27)</td>
<td>8 (42.11)</td>
<td>4 (36.36)</td>
<td>18 (25.71)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>23 (10.00)</td>
<td>3 (8.82)</td>
<td>2 (14.35)</td>
<td>4 (9.68)</td>
<td>2 (7.69)</td>
<td>6 (21.43)</td>
<td>8 (11.94)</td>
<td>6 (27.27)</td>
<td>-</td>
<td>-</td>
<td>6 (8.57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>117 (50.87)</td>
<td>6 (17.65)</td>
<td>27 (87.16)</td>
<td>51 (54.84)</td>
<td>9 (34.62)</td>
<td>6 (21.43)</td>
<td>5 (38.46)</td>
<td>20 (29.85)</td>
<td>10 (45.46)</td>
<td>18 (100.00)</td>
<td>11 (57.89)</td>
<td>7 (63.64)</td>
<td>46 (65.72)</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>230 (100.00)</td>
<td>34 (100.00)</td>
<td>31 (100.00)</td>
<td>28 (100.00)</td>
<td>26 (100.00)</td>
<td>28 (100.00)</td>
<td>13 (100.00)</td>
<td>67 (100.00)</td>
<td>22 (100.00)</td>
<td>18 (100.00)</td>
<td>19 (100.00)</td>
<td>11 (100.00)</td>
<td>70 (100.00)</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>3 (1.30)</td>
<td>-</td>
<td>2 (6.45)</td>
<td>1 (3.57)</td>
<td>3 (3.32)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>25 (10.87)</td>
<td>-</td>
<td>7 (22.58)</td>
<td>-</td>
<td>12 (42.86)</td>
<td>19 (20.43)</td>
<td>2 (7.69)</td>
<td>1 (3.57)</td>
<td>4 (5.97)</td>
<td>2 (9.09)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>77 (33.48)</td>
<td>23 (67.65)</td>
<td>-</td>
<td>23 (24.73)</td>
<td>15 (57.69)</td>
<td>16 (57.14)</td>
<td>7 (53.85)</td>
<td>38 (56.72)</td>
<td>9 (40.91)</td>
<td>1 (5.55)</td>
<td>5 (26.32)</td>
<td>1 (9.09)</td>
<td>16 (22.86)</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td>41 (17.83)</td>
<td>2 (5.88)</td>
<td>-</td>
<td>2 (2.15)</td>
<td>4 (15.39)</td>
<td>3 (10.72)</td>
<td>-</td>
<td>7 (4.54)</td>
<td>31 (18.2)</td>
<td>12 (66.67)</td>
<td>10 (52.63)</td>
<td>10 (27.27)</td>
<td>3 (45.71)</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>15 (6.52)</td>
<td>-</td>
<td>1 (3.23)</td>
<td>2 (1.07)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 (4.54)</td>
<td>27 (15.79)</td>
<td>5 (5.46)</td>
<td>14 (20.00)</td>
</tr>
<tr>
<td>J</td>
<td></td>
<td>.69 (30.00)</td>
<td>21 (67.74)</td>
<td>15 (53.57)</td>
<td>45 (48.39)</td>
<td>5 (19.23)</td>
<td>8 (28.57)</td>
<td>5 (38.46)</td>
<td>26 (86.86)</td>
<td>13 (13.64)</td>
<td>1 (5.26)</td>
<td>18 (18.18)</td>
<td>2 (8.57)</td>
<td>6 (8.57)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>230 (100.00)</td>
<td>34 (100.00)</td>
<td>31 (100.00)</td>
<td>28 (100.00)</td>
<td>26 (100.00)</td>
<td>28 (100.00)</td>
<td>13 (100.00)</td>
<td>67 (100.00)</td>
<td>22 (100.00)</td>
<td>18 (100.00)</td>
<td>19 (100.00)</td>
<td>11 (100.00)</td>
<td>7 (100.00)</td>
</tr>
</tbody>
</table>

Source: Field survey
Note: Figures in brackets denote the percentage in total.
Table 6.19: Sector wise and scheme-wise financial assistance to Sample Beneficiaries in 1996-97

<table>
<thead>
<tr>
<th>SN</th>
<th>Sector/Scheme</th>
<th>No. of Sample beneficiaries</th>
<th>Total Subsidy</th>
<th>Total Bank loan</th>
<th>Total Financial assistance</th>
<th>Average Subsidy</th>
<th>Average Bank loan</th>
<th>Average Financial assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>93</td>
<td>491796</td>
<td>871274</td>
<td>1363070</td>
<td>5288</td>
<td>9369</td>
<td>14657</td>
</tr>
<tr>
<td>1</td>
<td>Plough Bullock</td>
<td>34</td>
<td>169064</td>
<td>328063</td>
<td>497127</td>
<td>4972</td>
<td>9649</td>
<td>14621</td>
</tr>
<tr>
<td>2</td>
<td>Sericulture</td>
<td>31</td>
<td>163523</td>
<td>290025</td>
<td>453557</td>
<td>5275</td>
<td>9356</td>
<td>14631</td>
</tr>
<tr>
<td>3</td>
<td>Power Tiller/Pump set</td>
<td>28</td>
<td>154067</td>
<td>258319</td>
<td>412386</td>
<td>5502</td>
<td>9226</td>
<td>14728</td>
</tr>
<tr>
<td>II</td>
<td>Animal Husbandry</td>
<td>67</td>
<td>383529</td>
<td>679468</td>
<td>1062997</td>
<td>5724</td>
<td>10141</td>
<td>15865</td>
</tr>
<tr>
<td>1</td>
<td>Milch animal</td>
<td>26</td>
<td>145632</td>
<td>293175</td>
<td>438807</td>
<td>5601</td>
<td>11276</td>
<td>16877</td>
</tr>
<tr>
<td>2</td>
<td>Sheep rearing</td>
<td>28</td>
<td>160981</td>
<td>285256</td>
<td>446237</td>
<td>5746</td>
<td>10188</td>
<td>15937</td>
</tr>
<tr>
<td>3</td>
<td>Calf rearing</td>
<td>13</td>
<td>76816</td>
<td>128137</td>
<td>204950</td>
<td>5609</td>
<td>9857</td>
<td>15766</td>
</tr>
<tr>
<td>III</td>
<td>ISB</td>
<td>70</td>
<td>401403</td>
<td>711134</td>
<td>1112537</td>
<td>5734</td>
<td>10159</td>
<td>15893</td>
</tr>
<tr>
<td>1</td>
<td>Petty Shop</td>
<td>22</td>
<td>121955</td>
<td>227199</td>
<td>349154</td>
<td>5543</td>
<td>10327</td>
<td>15871</td>
</tr>
<tr>
<td>2</td>
<td>Weaving</td>
<td>18</td>
<td>110718</td>
<td>176064</td>
<td>286782</td>
<td>6151</td>
<td>9781</td>
<td>15932</td>
</tr>
<tr>
<td>3</td>
<td>Tailoring</td>
<td>19</td>
<td>105052</td>
<td>196022</td>
<td>301074</td>
<td>5529</td>
<td>10317</td>
<td>15846</td>
</tr>
<tr>
<td>4</td>
<td>Carpentry</td>
<td>11</td>
<td>63278</td>
<td>112249</td>
<td>175527</td>
<td>5753</td>
<td>10204</td>
<td>15957</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>230</td>
<td>1276728</td>
<td>2261876</td>
<td>3538604</td>
<td>5551</td>
<td>9834</td>
<td>15385</td>
</tr>
</tbody>
</table>

Source: Field survey.

The average subsidy and bank loan given Milch animal (26 families) under animal husbandry sector amounts to be the highest compared to all other schemes in all other sectors.

On the average, the highest amount of subsidy (Rs.6151) was given to the scheme relating to weaving. For plough bullocks (Bullocks purchased for ploughing) the subsidy and bank loan given per family on the average were the lowest. The total assistance, per family in the scheme on the average, was Rs.14621. The assistance for the purchase of plough bullocks ought to have been more, so as to enable the beneficiary families to buy quality animals. It is also to be noted that the largest number of beneficiary families (34) choose this scheme. In the infrastructural scheme, like power tiller, pump sets etc. in the agricultural sector, the average assistance was less even in compared to petty shop in the ISB sector.

The data in respect of the financial assistance provided to beneficiary families, occupationwise are presented in the table-6.20. It can be seen from the table that rural artisans received, on an average, the highest amount of
subsidy while small farmers secured on an average, the maximum bank loan compared to other categories. Second place in the case of bank loan is occupied by the rural artisans. And in case of subsidy, after rural artisans small farmers have occupied the second place on an average.

Table 6.20: Financial Assistance to Sample Beneficiaries occupationwise (in Rupees)

<table>
<thead>
<tr>
<th>SN</th>
<th>Category</th>
<th>No. of Sample beneficiaries</th>
<th>Total subsidy</th>
<th>Total Bank loan</th>
<th>Average subsidy (4/3)</th>
<th>Average Bank loan (5/3)</th>
<th>Average Financial assistance (6+7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large farmers</td>
<td>3</td>
<td>12256</td>
<td>29307</td>
<td>4085.53</td>
<td>9769.00</td>
<td>13854.33</td>
</tr>
<tr>
<td>2</td>
<td>Small farmers</td>
<td>25</td>
<td>148611</td>
<td>298927</td>
<td>5944.44</td>
<td>11957.08</td>
<td>17901.52</td>
</tr>
<tr>
<td>3</td>
<td>Marginal farmers</td>
<td>69</td>
<td>408170</td>
<td>711281</td>
<td>5915.51</td>
<td>10308.42</td>
<td>16223.93</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural labourers</td>
<td>77</td>
<td>383146</td>
<td>658730</td>
<td>4975.92</td>
<td>8554.94</td>
<td>13534.86</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural labourers</td>
<td>41</td>
<td>234280</td>
<td>404932</td>
<td>5714.15</td>
<td>9876.39</td>
<td>15590.54</td>
</tr>
<tr>
<td>6</td>
<td>Rural artisans</td>
<td>15</td>
<td>90265</td>
<td>158699</td>
<td>6017.67</td>
<td>10579.93</td>
<td>16597.60</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>230</td>
<td>1276728</td>
<td>2261876</td>
<td>5551.00</td>
<td>9834.24</td>
<td>15385.24</td>
</tr>
</tbody>
</table>

Source: Field survey.

Average financial assistance given to small households caste-wise is presented in the table 6.21. It can be observed from the table that 23 ST families got almost equal amount of subsidy and bank loan. While average bank loan per family is Rs.8385.74, the subsidy is almost equal to the bank loan being Rs.8378.61. Families belonging to other than SC and STs stand next to ST families on the receipt of financial assistance.

Table 6.21: Financial Assistance to Sample Beneficiaries caste-wise (in Rupees)

<table>
<thead>
<tr>
<th>SN</th>
<th>Particulars</th>
<th>Scheduled Castes</th>
<th>Scheduled Tribes</th>
<th>Other Castes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of Sample beneficiaries</td>
<td>90</td>
<td>23</td>
<td>117</td>
<td>230</td>
</tr>
<tr>
<td>2</td>
<td>Total Subsidy</td>
<td>429775</td>
<td>192708</td>
<td>654245</td>
<td>127673</td>
</tr>
<tr>
<td>3</td>
<td>Total Bank loan</td>
<td>813370</td>
<td>192855</td>
<td>1255651</td>
<td>2261876</td>
</tr>
<tr>
<td>4</td>
<td>Total Assistance</td>
<td>1243145</td>
<td>374563</td>
<td>1909896</td>
<td>3538604</td>
</tr>
</tbody>
</table>

Source: Field survey.
Impact on Income Generation

The data relating to the average net household income of the beneficiaries is estimated at two points of time, i.e. base year and post project year. Since the families were assisted in the year 1996-97, the income in that year was taken as the base year income. Three years time gap is given for the financial assistance to produce the necessary impact on the level of income. Data on net income is therefore collected in the year 1998-99.

Schemewise increase in income

The data relating to the net household income by schemes in the base and post-project assistance years are represented in table-6.22. It is needless to say that the income generating capacity of different schemes will be different. It can be observed from the table that average net household income in all the schemes has increased in the year 1998-99, compared to that in the base year.

The average family income, as found on the basis of our field survey, which was Rs.4316.89 prior to IRDP assistance increased to Rs.6046.43. The average increase in net income per household works out to be Rs.1729.54, which represents 40.06 per cent. In the agricultural sector, on the average the net annual income of 93 beneficiary families increased from Rs.5226.56 to Rs.7273.44 per household sharing an increased of Rs.2046.88 (39.16 per cent). The incremental income of Rs.2468.58 in the power tiller scheme is the highest compared to all other schemes in all the three sectors.

With the introduction of power tiller, energised pump sets could provide better irrigation/mechanization facilities to a larger area than before. This is the reason why the increase in income is the highest in that scheme. In the animal husbandry scheme, the incremental income from sheep rearing scheme is the highest. Barring weaving, the other three schemes in ISB sector
yielded more or less the same incremental income of a little more or less than Rs.1400.

### Table-6.22 : Average Net Family Income in the Base Year and Post-Project Year-Scheme-Wise

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/Schemes</th>
<th>Average net family income Base Year (1996-97)</th>
<th>Average net family income Post Project Year (1998-99)</th>
<th>Incremental income</th>
<th>Percentage Variation</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>5226.56</td>
<td>7273.44</td>
<td>2046.88</td>
<td>39.16</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Plough bullocks</td>
<td>4355.88</td>
<td>5833.82</td>
<td>1477.94</td>
<td>33.93</td>
<td>12.037*</td>
</tr>
<tr>
<td>3</td>
<td>Sericulture</td>
<td>5938.39</td>
<td>8228.39</td>
<td>2290.00</td>
<td>38.56</td>
<td>15.621*</td>
</tr>
<tr>
<td>4</td>
<td>Power</td>
<td>5495.71</td>
<td>7964.29</td>
<td>2468.58</td>
<td>44.92</td>
<td>15.186*</td>
</tr>
<tr>
<td>II</td>
<td>Animal Husbandry</td>
<td>4073.31</td>
<td>5789.70</td>
<td>1716.49</td>
<td>42.14</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Milch animals</td>
<td>4098.85</td>
<td>5760.38</td>
<td>1661.53</td>
<td>40.54</td>
<td>12.084*</td>
</tr>
<tr>
<td>2</td>
<td>Sheep rearing</td>
<td>4019.29</td>
<td>5820.00</td>
<td>1800.71</td>
<td>44.80</td>
<td>15.291*</td>
</tr>
<tr>
<td>3</td>
<td>Calf rearing</td>
<td>4137.69</td>
<td>5783.08</td>
<td>1645.39</td>
<td>39.77</td>
<td>9.004*</td>
</tr>
<tr>
<td>III</td>
<td>ISB</td>
<td>3341.64</td>
<td>4662.00</td>
<td>1320.36</td>
<td>39.51</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Petty Shops</td>
<td>3538.80</td>
<td>4941.36</td>
<td>1403.18</td>
<td>39.66</td>
<td>8.9116*</td>
</tr>
<tr>
<td>2</td>
<td>Weaning</td>
<td>2523.61</td>
<td>3501.67</td>
<td>978.06</td>
<td>38.76</td>
<td>8.7627*</td>
</tr>
<tr>
<td>3</td>
<td>Tailoring</td>
<td>3565.79</td>
<td>5063.16</td>
<td>1497.37</td>
<td>41.99</td>
<td>9.4805*</td>
</tr>
<tr>
<td>4</td>
<td>Carpentry</td>
<td>3900.00</td>
<td>5309.09</td>
<td>1409.09</td>
<td>36.13</td>
<td>7.8216*</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4316.89</td>
<td>6046.43</td>
<td>1729.54</td>
<td>40.06</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey.
Note: * Significant at 1 per cent level.

The reason for less incremental income in weaving is the non-introduction of improved power loom etc. In this sector tailoring recorded the highest increase in the net income. Thus agriculture sector schemes yield the highest average income (Rs.7273.44) followed by animal husbandry sector (Rs.5789.70).

#### Occupationwise increase in income

Details of income generation of beneficiary households occupation-wise are presented in the table-6.23. The resources and infrastructural facilities available with different categories of households will be different and these may also account for the difference in incremental income. It is observed from the table-6.23 that, families belonging to marginal and small farmers able to cross the state specific poverty line and is more than Rs.2200. The average net incremental income of the agricultural labourers is Rs.1291.82. In percentage terms the increase in net income of marginal farmers is 43.65 and
that of rural artisans 42.73. The three large farmers households which managed to get assistance although well above poverty line, got the highest increase in net income (Rs.2966.67). The ratio between the lowest and the highest is 2:3. It may be observed that the increase in income of all the households can be considered as more than satisfactory since it represents more than one third of the base year income. The paired 't' values computed on the basis of incomes in the base year and the post project year are significant at 1 per cent level i.e. highly significant.

Table-6.23 : Average Net Family income in the base year and post-project Year Occupationwise

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/ Schemes</th>
<th>Average net family income Base Year (1996-97)</th>
<th>Post-project Year (1998-99)</th>
<th>Incremental income</th>
<th>Percentage Increase</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large Farmers</td>
<td>7700.00</td>
<td>10666.67</td>
<td>2966.67</td>
<td>38.53</td>
<td>7.2308*</td>
</tr>
<tr>
<td>2</td>
<td>Small Farmers</td>
<td>5973.60</td>
<td>8216.40</td>
<td>2242.80</td>
<td>37.54</td>
<td>15.7290*</td>
</tr>
<tr>
<td>3</td>
<td>Marginal Farmers</td>
<td>5273.54</td>
<td>7523.91</td>
<td>2286.37</td>
<td>43.65</td>
<td>23.0168*</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural labourers</td>
<td>3479.74</td>
<td>4771.56</td>
<td>1291.82</td>
<td>37.12</td>
<td>20.4707*</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural labourers</td>
<td>3513.90</td>
<td>4867.32</td>
<td>1353.42</td>
<td>38.52</td>
<td>14.1827*</td>
</tr>
<tr>
<td>6</td>
<td>Rural Assistance</td>
<td>3136.33</td>
<td>4476.67</td>
<td>1340.34</td>
<td>42.73</td>
<td>8.2414*</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4316.89</td>
<td>6046.43</td>
<td>1729.54</td>
<td>40.46</td>
<td></td>
</tr>
</tbody>
</table>

Source : Field Survey.
Note: * Significant at 1 per cent level.

Castewise Increase in Income

Castewise incremental income analysis has been made because the abilities of families to manage projects normally vary with the social background of the family. Beneficiary families are, therefore, disaggregated into three groups-SCs, STs and other castes. An attempt is made to find out whether caste played any role in determining the increase in net income. The increase in net income of the beneficiary households castewise is shown in table-6.24. It is evident from the table that the incremental income of all the households of all caste is almost the same around Rs.1800 per family on an
average. The percentage variation in income of all the 230 families is 40.46, while that of 90 SC families is 49.19. The average income of 117 families belonging to other caste is higher both in the base year and in the post-project year. It is interesting to find that the average annual incomes of 23 ST families in both the base year and the post-project year are more than the corresponding incomes in respect of SC families. It means that ST families are better off compared to SC families at both points of time. The calculated paired 't' values between the 'pre' and 'post' IRDP incomes of the beneficiaries belonging to different caste groups are highly significant i.e. significant at 1per cent level.

**Table-6.24 : Average Net Family Income in the Base and Post-Project Years Castewise**

<table>
<thead>
<tr>
<th>SN</th>
<th>Caste</th>
<th>Annual net family income</th>
<th>Incremental Income</th>
<th>Percentage Variation</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base Year (1996-97)</td>
<td>Post-project Year (1998-99)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Scheduled Castes</td>
<td>3665.00</td>
<td>5468.00</td>
<td>1803.00</td>
<td>49.19</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>4180.43</td>
<td>5999.56</td>
<td>1819.13</td>
<td>43.52</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>4610.47</td>
<td>6500.60</td>
<td>1890.13</td>
<td>40.50</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>4316.89</td>
<td>6046.43</td>
<td>1729.54</td>
<td>4046</td>
</tr>
</tbody>
</table>

Source: Field survey.  
Note: Significant at 1 per cent level.

These findings would indicate that the types of schemes influence the scheme in come more than either the occupationwise or the castewise beneficiaries.

**Regression Analysis :**

To measure the impact of investment on additional income of the beneficiaries under different schemes, we have adopted the simple regression analysis technique.

**Table-6.25 : The Relation Between Investment and the Additional Income Generated-Schemewise**

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/Scheme</th>
<th>Co. efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>0.2071</td>
<td>9.2080*</td>
</tr>
</tbody>
</table>

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The third column of the table-6.25 shows the various elasticity coefficient of investment on increase in income under various schemes. The elasticity co-efficients are 0.2071 for plough bullocks, 0.1983 for sericulture, 0.3179 for power tiller, pumps sets etc. 0.4293 for milch animals, 0.1860 for sheep rearing, 0.2473 for calf rearing, 0.2261 for petty shop, 0,4035 for weaving, 0.3266 tailoring and 0.5163 for carpentry. This analysis shows that all the co-efficients are significantly different from zero, the level of significance being 1 per cent.

The regression co-efficients of investment on additional income generated are presented occupationwise in table-6.26 below. It is observed from the table that the regression co-efficient of the total investment on increase in income was 0.3582 in case of non-agricultural labourers followed by 0.3476 for large farmers, 0.2618 for small farmers, 0.2250 for agricultural labourers, 0.2165 for rural artisans and 0.1792 for marginal farmers. It is also observed that in all categories other than the large farmer category, the regression co-efficients are highly significant i.e. significant at 1 per cent level.

Table-6.26 : The Relation between Investment and the additional Income Generated-occupationwise

<table>
<thead>
<tr>
<th>SN</th>
<th>Occupational Category</th>
<th>Co-efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large Farmers</td>
<td>0.3476</td>
<td>6.8322</td>
</tr>
</tbody>
</table>
Table-6.27 gives the results of the regression analysis between investment and the additional income generated in respect of different castes. From the results given in the table, it is observed that the elasticity coefficients of the investment on increase in additional income are 0.1891 for SCs and 0.2359 and 0.2799 for STs and other caste respectively. It is also found that all the co-efficients are significantly different from zero.

Table-6.27 : The relation between Investment and the additional Income Generated Caste wise

<table>
<thead>
<tr>
<th>SN</th>
<th>Caste</th>
<th>Co-efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scheduled Castes</td>
<td>0.1891</td>
<td>22.3644*</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>0.2359</td>
<td>18.6490*</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>0.2799</td>
<td>22.8094*</td>
</tr>
</tbody>
</table>

Source: Field survey.
Note: * Significant at 1 per cent level.

Sen’s Index of Poverty

The estimation of poverty based on Head Count Ratio is completely insensitive in distribution of income among the poor. A pure transfer of income from the poorest of the poor to those who are better off will either keep ‘H’ unchanged or make it go down – the response is perverse one. Overcoming the short-coming of the Head Count Ratio method and Income Gap Ratio Method, Sen has suggested an alternative approach, which focuses on the absolute income level of the lowest strata or the poverty level. The extent of poverty among beneficiaries by Sen’s formula is presented in the table-6.28. Here poverty line has been defined as the income level of Rs.6400.

It is observed from the table-6.28 that the income gap or poverty gap was 0.006 per cent for SCs, 0.003 for STs and 0.005 for other caste(in the base year). Yielding Sen’s index of poverty of 0.10 per cent for SCs, 0.17 per
cent for STs and 0.14 per cent for other caste in the base year. After the implementation of IRDP, an improvement was seen among the beneficiaries of STs and ‘Other Caste’ with Sen’s index of poverty reduced to 0.06 per cent. However, the reduction in extent of poverty in SCs was relatively less impressive in comparison with the STs and ‘Other Castes’. Thus Sen’s index of poverty indicated that the severity of poverty was reduced to these sections of the society.

Table-6.28 : Sen’s Index of Poverty Castewise

<table>
<thead>
<tr>
<th>SN</th>
<th>Caste</th>
<th>Head count ratio</th>
<th>Income gap ratio</th>
<th>Gini ratio</th>
<th>Sen’s poverty index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scheduled Caste</td>
<td>0.97</td>
<td>0.61</td>
<td>0.006</td>
<td>0.007</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>0.87</td>
<td>0.61</td>
<td>0.003</td>
<td>0.012</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>0.89</td>
<td>0.45</td>
<td>0.005</td>
<td>0.008</td>
</tr>
<tr>
<td>4</td>
<td>Total:</td>
<td>0.91</td>
<td>0.53</td>
<td>0.002</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Source: Field survey.

Income Distribution

In order to assess the impact of IRDP on income distribution, Gini Co-efficient in respect of different distributions have been computed for studying disparities among different distributions pertaining to SC, ST and other castes. The distribution of income among beneficiary households is shown in the table-6.29. It could be seen from the table that, 50 per cent of the total beneficiaries received 37.56 per cent of income during base year, their share in creased to 40.47 per cent in post-project year, which indicates marginal decline in income inequalities. The Gini co-efficient also deceased from 0.15 to 0.13. Thus, it can be said that IRDP had positive impact on distribution of income. But in case of SCs, while 70 per cent of beneficiaries received 60-84 per cent of the income during the base year, their share declined to 59.89 per cent in post project year, indicating a marginal increase in income inequalities. The Gini co-efficient increased from 0.15 to 0.16 in case of SC
beneficiaries. By contrast in case of STs and ‘other castes’ beneficiaries, the Gini co-efficient declined from 0.14 to 0.10 and 0.19 to 0.18 respectively during the post-project year. The above results conclude that the IRDP assistance had a positive impact on distribution of income in case of STs and other castes.

Table 6.29: Distribution of income among Beneficiaries

<table>
<thead>
<tr>
<th>Cumulative Percentage of Income receivers</th>
<th>Scheduled Caste</th>
<th>Scheduled Tribes</th>
<th>Other Caste</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>4.83</td>
<td>5.57</td>
<td>6.82</td>
<td>6.45</td>
</tr>
<tr>
<td>20</td>
<td>11.81</td>
<td>12.48</td>
<td>13.96</td>
<td>14.09</td>
</tr>
<tr>
<td>30</td>
<td>22.20</td>
<td>19.93</td>
<td>24.12</td>
<td>23.55</td>
</tr>
<tr>
<td>40</td>
<td>28.91</td>
<td>28.00</td>
<td>31.88</td>
<td>31.52</td>
</tr>
<tr>
<td>50</td>
<td>38.50</td>
<td>37.34</td>
<td>40.46</td>
<td>40.37</td>
</tr>
<tr>
<td>60</td>
<td>49.28</td>
<td>48.15</td>
<td>49.61</td>
<td>49.62</td>
</tr>
<tr>
<td>70</td>
<td>60.84</td>
<td>59.89</td>
<td>59.28</td>
<td>59.42</td>
</tr>
<tr>
<td>80</td>
<td>72.70</td>
<td>71.96</td>
<td>69.27</td>
<td>70.29</td>
</tr>
<tr>
<td>90</td>
<td>84.23</td>
<td>84.53</td>
<td>82.42</td>
<td>83.04</td>
</tr>
<tr>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Gini Co-efficient

Source: Field survey

6.12 IMPACT ON EMPLOYMENT

The IRDP is mainly a self-employment programme for the benefits of the rural poor. The identified beneficiary households are provided with financial assistance to acquire a productive asset in an identified scheme and the creation, maintenance and operation of such an asset is expected to generate employment to the members of the beneficiary households. As far as employment generation is concerned, the benefit is to be estimated in terms of additional man-days of employment created for the family. It may be noted
that incremental employment depends on the nature of the project or asset given to a family. Some projects are more labour intensive and create more man-days of employment to the family. Moreover, it is not reasonable to expect that the schemes under IRDP will generate additional employment to all members of the family, although family is taken as a unit in IRDP. There are also difficulties in estimating employment generation in such small schemes as the members of the family will be working in the project according to their convenience. Subject to these limitations, the impact of various schemes on employment generation is analysed.

Schemewise Employment Generation

The data relating to scheme-wise average household employment of beneficiary families during the base and post-project year are presented in the table-6.30. The table shows that the average household employment has increased during the post-project year for beneficiaries under all the schemes. Taking all the schemes together, the average household employment has increased from 546.43 to 776.60 man-days indicating 42.12 per cent increase in the post-project year over the base year. Among the schemes, sericulture has recorded the highest increase (55.57 per cent) followed by carpentry (51.50 per cent) and sheep rearing (48.44 per cent). From the data it appears that both plough bullocks and sericultural scheme have provided more man-days of employment both in the base year and post-project year compared to all other schemes.

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/ Schemes</th>
<th>1996-97</th>
<th>1998-99</th>
<th>Incremental employment</th>
<th>Percentage Variation</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>731.10</td>
<td>1078.43</td>
<td>347.33</td>
<td>47.50</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Plough Bullock</td>
<td>925.91</td>
<td>1336.94</td>
<td>411.03</td>
<td>44.39</td>
<td>17.6282*</td>
</tr>
<tr>
<td>3</td>
<td>Sericulture</td>
<td>899.03</td>
<td>1398.58</td>
<td>499.55</td>
<td>55.57</td>
<td>20.8440*</td>
</tr>
<tr>
<td>4</td>
<td>Power Tiller water Pumps etc.</td>
<td>308.64</td>
<td>410.07</td>
<td>101.43</td>
<td>32.86</td>
<td>12.9214*</td>
</tr>
<tr>
<td>5</td>
<td>Animal Husbandry</td>
<td>336.45</td>
<td>455.52</td>
<td>119.07</td>
<td>40.62</td>
<td></td>
</tr>
</tbody>
</table>

Table-6.30 : Schemewise Average Beneficiary Family Employment (man-days) in 1996-97 and 1998-99
These two schemes are more labour intensive than the other schemes. The incremental man-days of employment have exceeded 400 in both the schemes. In the animal-husbandry sector, milch animal and calf-rearing schemes have generated additional employment of less than 100 man-days, while in sheep rearing it has exceeded 100 man-days. For a family of five members the average employment generated per member works out to be less than 20 man-days per year. This is because these schemes do not require such additional labour for their operation. Similar is the case with power tiller/water pump scheme in the agricultural sector. In the ISB sector carpentry scheme naturally created additional employment in man-days than other schemes in the sector. Next comes tailoring which created additional employment of 212.58 man-days. Interestingly the weaving scheme generated much lower employment at 119.22 man-days only. The paired t values indicate that the additional man-days of employment increased significantly in the post-project year (1998-99) over the base year (1996-97).

**Occupationwise Employment Generation**

To assess the differential impact, if any, on various categories of beneficiaries, the data were disaggregated into six occupational categories as shown in the table-6.31. It can be observed from the table that, the percentage increase in average household employment was the highest for marginal farmers (48.57) (large formers being excluded) followed by rural artisans (42.88) and small farmers (42.54). The additional employment created in terms of man-days were 296.86 for marginal farmers, 230.66 for rural artisans and 209.09 for agricultural labourers. Non-agricultural labour

<table>
<thead>
<tr>
<th></th>
<th>Milch Animal</th>
<th>Sheep rearing</th>
<th>Calf rearing</th>
<th>ISB</th>
<th>Petty Shop</th>
<th>Weaning</th>
<th>Tailoring</th>
<th>Carpentry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>342.00</td>
<td>437.92</td>
<td>95.92</td>
<td>502.03</td>
<td>452.23</td>
<td>488.17</td>
<td>534.00</td>
<td>569.09</td>
<td>546.43</td>
</tr>
<tr>
<td>2</td>
<td>335.50</td>
<td>498.00</td>
<td>162.50</td>
<td>682.90</td>
<td>600.04</td>
<td>607.39</td>
<td>746.58</td>
<td>862.18</td>
<td>776.60</td>
</tr>
<tr>
<td>3</td>
<td>327.45</td>
<td>399.23</td>
<td>71.78</td>
<td>180.87</td>
<td>147.81</td>
<td>119.22</td>
<td>212.58</td>
<td>293.09</td>
<td>230.17</td>
</tr>
<tr>
<td>IV</td>
<td>502.03</td>
<td>682.90</td>
<td>180.87</td>
<td>36.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>452.23</td>
<td>600.04</td>
<td>147.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>488.17</td>
<td>607.39</td>
<td>119.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>534.00</td>
<td>746.58</td>
<td>212.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>569.09</td>
<td>862.18</td>
<td>293.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>546.43</td>
<td>776.60</td>
<td>230.17</td>
<td>42.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey
Note: * Significant at 1 percent probability level
families stand last with 159.33 man-days of additional employment. The incremental employment is found to be significant in case of all occupational categories as indicated by the paired t values.

### Table-6.31 : Occupationwise Average Beneficiary Family Employment (man-days) in 1996-97 and 1998-99

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/Scheme</th>
<th>1996-97</th>
<th>1998-99</th>
<th>Incremental Employment</th>
<th>Percentage Variation</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large Farmers</td>
<td>983.33</td>
<td>1531.33</td>
<td>548.00</td>
<td>55.73</td>
<td>2.6668*</td>
</tr>
<tr>
<td>2</td>
<td>Small Farmers</td>
<td>445.04</td>
<td>634.36</td>
<td>189.32</td>
<td>42.54</td>
<td>5.5500*</td>
</tr>
<tr>
<td>3</td>
<td>Marginal Farmers</td>
<td>610.80</td>
<td>907.48</td>
<td>296.68</td>
<td>48.57</td>
<td>11.4711*</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural labours</td>
<td>540.36</td>
<td>749.45</td>
<td>209.09</td>
<td>38.69</td>
<td>11.9537*</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural labours</td>
<td>482.46</td>
<td>641.76</td>
<td>159.30</td>
<td>33.02</td>
<td>11.9322*</td>
</tr>
<tr>
<td>6</td>
<td>Rural artisans</td>
<td>537.87</td>
<td>768.53</td>
<td>230.66</td>
<td>42.88</td>
<td>7.3234*</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>546.43</td>
<td>776.60</td>
<td>230.17</td>
<td>42.12</td>
<td></td>
</tr>
</tbody>
</table>

Source : Field survey.
Note : * Significant at 1 Per cent level.

### Castewise Employment Generation

The average household employment of the beneficiary groups, i.e. SCs, STs and other castes during the base year(1996-97) and post-project year(1998-99) are shown in the table-6.32. It can be seen from the table that, the incremental employment was relatively high for other castes. Compared to ST families, SC families are able to secure more man-days of additional employment. The incremental employment is found to be significant in respect of all castes as indicated by paired t values displayed in the table below.

### Table-6.32 : Castewise Average Beneficiary Family Employment (man-days) in the year 1996-97 and 1998-99

<table>
<thead>
<tr>
<th>SN</th>
<th>Caste</th>
<th>1996-97</th>
<th>1998-99</th>
<th>Incremental Employment</th>
<th>Percentage Variation</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scheduled Castes</td>
<td>531.55</td>
<td>756.24</td>
<td>224.69</td>
<td>42.27</td>
<td>13.2547*</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>498.87</td>
<td>696.09</td>
<td>197.22</td>
<td>39.53</td>
<td>5.9226*</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>567.21</td>
<td>808.08</td>
<td>240.87</td>
<td>42.47</td>
<td>13.9782*</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>546.43</td>
<td>776.60</td>
<td>230.17</td>
<td>42.12</td>
<td></td>
</tr>
</tbody>
</table>

Source : Field survey.
Note : * Significant at 1 Per cent probability level.
Regression Analysis

To study the impact of investment on additional employment generation under different schemes, simple regression model has been fitted. The impacts of investments on employment generation under different schemes are presented in the table-6.33 below. The elasticity co-efficients of investments on employment generation under different schemes are: 0.5018 for plough bullocks, 0.2370 for sericulture, 0.1825 for power tiller, water pumps etc. 0.4732 for milch animals, 0.1596 for sheep rearing, 0.2708 for calf rearing, 0.1863 for petty shop, 0.3569 for weaving, 0.4136 for tailoring and 0.2209 for carpentry. We have also found that all co-efficients are significantly different from zero. It means that investment is having significant impact on employment generation in respect of every scheme.

Table-6.33 : Impact of Investment on Employment Schemewise

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/Scheme</th>
<th>Co-efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Plough Bullocks</td>
<td>0.5073</td>
<td>18.3815*</td>
</tr>
<tr>
<td>3</td>
<td>Sericulture</td>
<td>0.2370</td>
<td>19.7438*</td>
</tr>
<tr>
<td>4</td>
<td>Power tiller water pump etc.</td>
<td>0.1825</td>
<td>13.0116*</td>
</tr>
<tr>
<td>5</td>
<td>II Animal husbandry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Milch animal</td>
<td>0.4732</td>
<td>11.7396*</td>
</tr>
<tr>
<td>7</td>
<td>Sheep rearing</td>
<td>0.1596</td>
<td>12.0094*</td>
</tr>
<tr>
<td>8</td>
<td>Calf rearing</td>
<td>0.2708</td>
<td>11.5062</td>
</tr>
<tr>
<td>9</td>
<td>III ISB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Petty Shop</td>
<td>0.1863</td>
<td>9.7348*</td>
</tr>
<tr>
<td>11</td>
<td>Weaving</td>
<td>0.3659</td>
<td>12.6013*</td>
</tr>
<tr>
<td>12</td>
<td>Tailoring</td>
<td>0.4136</td>
<td>12.4295*</td>
</tr>
<tr>
<td>13</td>
<td>Carpentry</td>
<td>0.2209</td>
<td>7.6004*</td>
</tr>
</tbody>
</table>

Source : Field survey
Note : * Significant at 1 per cent probability level.

The occupationwise results of the impact of investment on employment are given in the table-6.34. From the results given in the table, the elasticity co-efficients of investment on the increase in employment are 0.1926 for marginal farmers, 0.1418 for small farmers, 0.1193 for large farmers, 0.2748 for agricultural labourers, and 0.2749 for rural artisans. It is also found that
the co-efficient in respect of each category is significant at 1 per cent level except the large farmer category where the co-efficient is not significant at 1 per cent level of significance. This means that investment is having positive and significant impact on employment generation in respect of each occupation category excepting large farmers.

### Table 6.34: Impact of investment on employment occupationwise

<table>
<thead>
<tr>
<th>SN</th>
<th>Occupation Category</th>
<th>Co-efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Large Farmers</td>
<td>0.1193</td>
<td>2.3805 NS</td>
</tr>
<tr>
<td>2</td>
<td>Small farmers</td>
<td>0.1418</td>
<td>5.2810*</td>
</tr>
<tr>
<td>3</td>
<td>Marginal farmers</td>
<td>0.1926</td>
<td>11.7802*</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural labourers</td>
<td>0.2478</td>
<td>12.4533*</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural labourers</td>
<td>0.3062</td>
<td>11.8900*</td>
</tr>
<tr>
<td>6</td>
<td>Rural artisans</td>
<td>0.2749</td>
<td>6.9714*</td>
</tr>
</tbody>
</table>

Source: Field survey  
Note: * Significant 1 per cent level  
NS - Not Significant

Table 6.35 shows the results of the impact of investment on employment generation caste-wise. The table also reveals that the elasticity co-efficient of investment on increase in employment is 0.2485 in case of SC, and 0.1604 and 0.3271 in the case of STs and other castes respectively. It is also observed that all the co-efficient are significant at 1 per cent level.

### Table 6.35: Impact of investment on Employment- Caste-wise

<table>
<thead>
<tr>
<th>SN</th>
<th>Caste</th>
<th>Co-efficient</th>
<th>Paired t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scheduled Castes</td>
<td>0.2485</td>
<td>13.1634*</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>0.1604</td>
<td>6.2960*</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>0.3271</td>
<td>14.0582*</td>
</tr>
</tbody>
</table>

Source: Field survey  
Note: * Significant at 1 Per cent Probability level.

The hypothesis tested is that the program does not generate employment opportunities to sample household. The results have proved that the IRDP has a positive effect on employment. Hence, above hypothesis has been rejected.
6.13 REPAYMENT PERFORMANCE

The IRDP beneficiaries are provided financial assistance partly in the form of subsidy by the government and partly in the form of loan by the financial institutions. A part of the incremental income arising out of the operation of the project has to be utilised to repay the loan given by the financial institutions as per the repayment schedule fixed by the authorities. Since the loan has to be repaid, the financial assistance must be productively utilised by the beneficiaries. There will be default in repayment if the loan is partly or wholly diverted to other purposes such as consumption or to repay the old debts etc. Such practices will not enable the poor families to move to higher income levels and defeat the very purpose of IRDP assistance. Prompt repayment of funds will enable the financial institutions to recycle its funds. The survival of financial institution depends on repayment performance. An important criteria for the success or otherwise for IRD programme is the recovery of loans advanced to the beneficiaries. It may be understood that the repayment schedule varies from scheme to scheme and repayment has to commence after the lapse of a certain period known as gestation period. The repayment pattern is analysed and presented after the expiry of three years and in some of the schemes the repayment period is not yet over. These points must be kept in mind before drawing conclusions from the data given in the following table. The table indicates the comparative repayment performance of beneficiaries.

Schemewise Repayment Performance

The pattern of repayment of loans scheme-wise is shown in table-6.36, when all schemes are taken together, it is seen in the table that 37.83 per cent of the beneficiaries have repaid the loan in full and another 13.04 per cent have repaid more than 50 per cent of the loan. Nearly 15 per cent of the beneficiaries did not start repayment and became total defaulters. Highest repayment performance is seen in power tiller, water pump scheme, 18 out of 28 beneficiary families (64.29 per cent) have repaid the loan in full. Next comes the sericulture with 54.84 per cent of the beneficiaries repaying the loan in full. In the rest of the schemes except carpentry and sheep rearing, the percentage of total repayment varied between 30 and 39. In sheep rearing scheme, the percentage of total repayers is 25, total defaulters is 21.43 and
the beneficiaries who repaid less than half of the amount are 50. In carpentry scheme, the percentage of total repayers is 0.09.

Table-6.36 : Scheme-wise Pattern of Repayment of Loan

<table>
<thead>
<tr>
<th>SN</th>
<th>Sectors/Scheme</th>
<th>No. of beneficiaries who repaid in full</th>
<th>No. of beneficiaries who repaid partially</th>
<th>No. of beneficiaries who did not repay at all</th>
<th>No. of Sample beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Below 50%</td>
<td>Above 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I</td>
<td>Agriculture</td>
<td>47(50.54)</td>
<td>24(25.8)</td>
<td>9(9.68)</td>
<td>13(13.98)</td>
</tr>
<tr>
<td>1</td>
<td>Plough bullocks</td>
<td>12(35.29)</td>
<td>13(38.2)</td>
<td>3(8.82)</td>
<td>6(17.65)</td>
</tr>
<tr>
<td>2</td>
<td>Sericulture</td>
<td>17(54.84)</td>
<td>7(22.58)</td>
<td>3(9.68)</td>
<td>4(12.90)</td>
</tr>
<tr>
<td>3</td>
<td>Power tiller Pumps etc.</td>
<td>18(64.29)</td>
<td>4(14.29)</td>
<td>3(10.71)</td>
<td>3(10.71)</td>
</tr>
<tr>
<td>II</td>
<td>Animal Husbandry</td>
<td>20(29.85)</td>
<td>25(37.3)</td>
<td>8(11.94)</td>
<td>14(20.90)</td>
</tr>
<tr>
<td>1</td>
<td>Milch animal</td>
<td>8(30.77)</td>
<td>9(34.62)</td>
<td>4(15.38)</td>
<td>5(19.23)</td>
</tr>
<tr>
<td>2</td>
<td>Sheep rearing</td>
<td>7(25.00)</td>
<td>14(50.0)</td>
<td>1(3.57)</td>
<td>6(21.43)</td>
</tr>
<tr>
<td>3</td>
<td>Calf rearing</td>
<td>5(38.45)</td>
<td>2(15.38)</td>
<td>3(23.08)</td>
<td>3(23.08)</td>
</tr>
<tr>
<td>III</td>
<td>ISB</td>
<td>20(28.57)</td>
<td>31(44.3)</td>
<td>13(18.6)</td>
<td>6(8.57)</td>
</tr>
<tr>
<td>1</td>
<td>Petty Shop</td>
<td>7(31.82)</td>
<td>10(45.5)</td>
<td>4(18.1)</td>
<td>1(4.55)</td>
</tr>
<tr>
<td>2</td>
<td>Weaving</td>
<td>6(33.33)</td>
<td>7(38.89)</td>
<td>4(22.22)</td>
<td>1(5.56)</td>
</tr>
<tr>
<td>3</td>
<td>Tailoring</td>
<td>6(31.58)</td>
<td>9(47.37)</td>
<td>1(5.26)</td>
<td>3(15.79)</td>
</tr>
<tr>
<td>4</td>
<td>Carpentry</td>
<td>1(9.09)</td>
<td>5(45.46)</td>
<td>4(36.36)</td>
<td>1(9.09)</td>
</tr>
<tr>
<td>5</td>
<td>Total</td>
<td>87(37.83)</td>
<td>80(34.8)</td>
<td>30(13.1)</td>
<td>33(14.35)</td>
</tr>
</tbody>
</table>

Source: Field survey  
Note: Figures in brackets do not note Percentage to total

Occupationwise Repayment Performance

Details of the occupationwise repayment performance of sample beneficiaries are given in table-6.37. The farming class, as a whole, has been found better in repayment. While all the 3 large farmers have repaid the loan in full, 80 per cent of the small farmers and 60.87 per cent of marginal farmers have repaid the loan in full. But only 8 out of 77 agricultural labourers farmers have repaid the loan in full. Thus the repayment performance of agricultural labourers is poor as 25.97 per cent of them are total defaulters and 49.35 per cent have repaid less than half of the loan amount. Non-agricultural labourers too are not better performers.
Table-6.37 : Occupationwise Pattern of Repayment of loan

<table>
<thead>
<tr>
<th>SN</th>
<th>Category</th>
<th>No. of beneficiaries repaid in full</th>
<th>No. of beneficiaries repaid partially</th>
<th>No. of beneficiaries who did not repay at all</th>
<th>No. of Sample beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Below 50%</td>
<td>Above 50%</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Large farmers</td>
<td></td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Small farmers</td>
<td></td>
<td>20</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Marginal farmers</td>
<td></td>
<td>42</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural labourers</td>
<td></td>
<td>8</td>
<td>38</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Non-agricultural labourers</td>
<td></td>
<td>11</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Rural artisans</td>
<td></td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>87</td>
<td>80</td>
<td>30</td>
</tr>
</tbody>
</table>

Source : Field survey
Note : Figures in brackets indicate percentage to total

From the table, it is also seen that only 37.83 per cent of the sample beneficiaries repaid the loan in full, 14.35 per cent were total defaulters. The number of beneficiaries repaying partially below 50 per cent was 80(34.78) per cent and above 50 per cent was mere 13.04 per cent.

Castewise Repayment Performance

The details relating to the castewise loan repayment performance of sample beneficiaries are shown in the table-6.38. Taking all the castes together 37.83 per cent of the families have repaid the loan in full, 13.04 per cent repaid more than 50 per cent and 14.35 per cent of the families have not started repayment at all. About 65.41 per cent of the families belonging to other castes have repaid in full and 16.24 per cent have repaid more than half of the loan. Among the defaulters, the highest percentage (20) is from SC families. About 15.56 per cent of the SC families and 30.44 per cent of the ST families have repaid the loan in full.
Table 6.38: Castewise pattern of Repayment of Loan

<table>
<thead>
<tr>
<th>SN</th>
<th>Category</th>
<th>No. of Sample beneficiaries</th>
<th>No. of beneficiaries repaid in full</th>
<th>No. of beneficiaries repaid partially</th>
<th>No. of beneficiaries who did not repay at all</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Below 50%</td>
<td>Above 50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Scheduled Caste</td>
<td>93</td>
<td>14 (15.56)</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(100.00)</td>
<td></td>
<td>(54.44)</td>
<td>(10.00)</td>
</tr>
<tr>
<td>2</td>
<td>Scheduled Tribes</td>
<td>23</td>
<td>7</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(100.00)</td>
<td>(30.44)</td>
<td>(43.48)</td>
<td>(8.69)</td>
</tr>
<tr>
<td>3</td>
<td>Other Castes</td>
<td>117</td>
<td>66</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(100.00)</td>
<td>(65.41)</td>
<td>(17.95)</td>
<td>(16.24)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>230</td>
<td>87</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(100.00)</td>
<td>(37.83)</td>
<td>(34.78)</td>
<td>(13.04)</td>
</tr>
</tbody>
</table>

Source: Field survey
Note: Figures in the brackets denote percentage to total