CHAPTER - VI
CHAPTER VI

IMPACT OF CO-OPERATIVE AGRICULTURAL CREDIT

6.1. Introduction

6.2 Socio-Economic Profile of Borrowers and Non-borrowers

6.3 Impact of Agricultural Credit on Agricultural Production

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6.1 Introduction

This chapter is divided into three sections. First section gives the profile of the sample borrowers vis-à-vis the control group (non-borrowers) who are selected for the study. Second section analyses the impact of credit on agricultural production, income, employment, savings, standard of life etc., of the borrowers and compares them with the relevant positions of the control group. An analysis of the correlation between different variables like loan amount, income, employment, etc., of the borrowers is attempted in the last section.

6.2 Socio-Economic Profile of Borrowers and Non-Borrowers

The socio-economic profile of the sample borrowers and non-borrowers includes such factors like the age of sample respondents, their educational qualification, occupation, size of land holdings, irrigation facilities, total credit of borrowers and total income.

6.2.1 Age Group

As a prelude to the analysis of the sample beneficiaries of the study area, age distribution is measured. In demographic analysis the common practice is to classify the samples in age groups of ten. Table 6.1
illustrates the age wise classification of the sample borrowers and of members of the control group.

**TABLE 6.1**

**AGE-WISE CLASSIFICATIONS OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Age</th>
<th>Borrower</th>
<th></th>
<th>Non Borrower</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>25-35</td>
<td>30</td>
<td>20</td>
<td>37</td>
<td>25</td>
<td>67</td>
</tr>
<tr>
<td>35-45</td>
<td>36</td>
<td>24</td>
<td>36</td>
<td>24</td>
<td>72</td>
</tr>
<tr>
<td>45-55</td>
<td>39</td>
<td>26</td>
<td>39</td>
<td>26</td>
<td>78</td>
</tr>
<tr>
<td>55 and Above</td>
<td>45</td>
<td>30</td>
<td>38</td>
<td>25</td>
<td>83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>150</td>
<td>100</td>
<td>150</td>
<td>100</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: Primary Data.
Mean Age of Borrowers = 46.8
Mean Age of Non-Borrowers = 45.3

An analysis of the age wise distribution of the sample showed that the mean age of borrowers and non-borrowers is relatively 46.8 and 45.3 i.e., the borrowers were relatively older than non-borrowers. Nearly 24 per cent of the borrowers come under the age group of 35 to 45 and about 24 per cent of non-borrowers are within this group. The table reveals that 20 per cent of the borrowers are under the age group of 25-35 as against 25 per cent of non-borrowers and 30 per cent of borrowers are in the age group of 55 and above as against 25 per cent of non-borrowers.
6.2.2 Education

Education is vital and very important in shaping human beings and enabling them to function well in all disciplines. It is considered to be an important parameter for economic development and social welfare and for individual development in the present context. The index ordinarily used for establishing the position of a group in the socio-economic characteristic is the percentage of literates in the population. Education is the most powerful element which transmits human population into human capital. The status of a family depends to a certain degree in the educational attainment. Table 6.2 clearly shows the educational status of the sample respondents.

**TABLE 6.2**

CLASSIFICATION OF BORROWERS AND NON-BORROWERS

ACCORDING TO THEIR QUALIFICATION

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Illiterate</td>
<td>44</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>Up to SSLC</td>
<td>32</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>SSLC</td>
<td>32</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>27</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>Degree and Above</td>
<td>15</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>150</td>
<td>100</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary Data.
Regarding educational qualification, what seems significant is that illiterates and less educated are more in number in the group of borrowers than in the group of non-borrowers. The table 6.2 shows that the number of farmers below SSLC qualification are same for both borrowers and non-borrowers i.e. a total of 76 out of the sample size of 150.

6.2.3 Occupational Status

The sample respondents are classified based on their principal occupation. The nature of occupation has its impact on the social status. With the increasing participation in economic activities the social status of the sample respondents also changes resulting in upgradation of their position in society and particularly in the family. Table 6.3 gives the occupational status of the sample respondents.
### TABLE 6.3
CLASSIFICATION OF BORROWERS AND NON-BORROWERS
ACCORDING TO THEIR MAIN OCCUPATION

<table>
<thead>
<tr>
<th>Main Occupation</th>
<th>Borrower</th>
<th></th>
<th>Non Borrower</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>71</td>
<td>47</td>
<td>62</td>
<td>41</td>
<td>133</td>
</tr>
<tr>
<td>Agriculture Labour</td>
<td>17</td>
<td>12</td>
<td>15</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Dairying</td>
<td>14</td>
<td>9</td>
<td>18</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>Salaried Job</td>
<td>24</td>
<td>16</td>
<td>25</td>
<td>17</td>
<td>49</td>
</tr>
<tr>
<td>Small Scale Village Industry</td>
<td>24</td>
<td>16</td>
<td>27</td>
<td>18</td>
<td>51</td>
</tr>
<tr>
<td>Trade</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Business</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data.

Agriculture constitutes the main occupation of 47 per cent of the borrowers and of 41 per cent of non-borrowers. Agriculture labourers are only 12 and 10 per cent respectively of the sample borrowers and non-borrowers. Of the total 300 sample respondents more than one third of the respondent’s occupation was agriculture.

**6.2.4 Size of Land Holdings**

Possession of land is another aspect of consideration while analysing the socio-economic profile of the sample respondents.
TABLE 6.4
CLASSIFICATION OF BORROWERS AND NON-BORROWERS
ACCORDING TO THEIR SIZE OF LAND HOLDINGS

<table>
<thead>
<tr>
<th>Size of Land Holdings</th>
<th>Borrower</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Up to 1 Acre</td>
<td>17</td>
<td>12</td>
<td>15</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>1 to 2 Acre</td>
<td>69</td>
<td>46</td>
<td>61</td>
<td>41</td>
<td>130</td>
</tr>
<tr>
<td>2 to 4 Acre</td>
<td>50</td>
<td>33</td>
<td>61</td>
<td>41</td>
<td>111</td>
</tr>
<tr>
<td>4 to 5 Acre</td>
<td>14</td>
<td>9</td>
<td>12</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>5 and Above</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data.
Mean Holdings: Borrowers = 2.41, Non-Borrowers = 2.49.

Table 6.4 presents the size of land holdings of the borrowers and non-borrowers and gives the sizes of their mean holdings which are 2.41 and 2.49 acres respectively. Among borrowers, 58 per cent possess upto 2 acre of land, while among non-borrowers it is 51 per cent. The sample of borrowers and non-borrowers do not show much difference in their land holdings.

6.2.5 Irrigation Facilities

Irrigation facility is an important socio-economic factor which determines the success of a farm produce. As most of the sample respondents are farmers, it is worthwhile to see their irrigation facilities.
TABLE 6.5
CLASSIFICATION OF BORROWERS AND NON-BORROWERS BASED ON AVAILABILITY OF IRRIGATION FACILITIES

| Irrigation Facilities | Borrower | | Non Borrower | | Total |
|-----------------------|----------|----------------|----------------|--------|
|                       | Number   | Percentage     | Number         | Percentage     |
| Yes                   | 132      | 88             | 112            | 75              | 244 |
| No                    | 18       | 12             | 38             | 25              | 56  |
| Total                 | 150      | 100            | 150            | 100             | 300 |

Source: Primary Data.

The data results show that a majority of the samples selected for the study are enjoying irrigation facilities for their agricultural activities. The percentage of borrowers having irrigation facilities is 88 while that of non-borrowers is only 75. The position of borrowers is comparatively better than that of non-borrowers as regard to the availability of irrigation facilities.

6.2.6 Modern Techniques of Agricultural Cultivation

Use of modern techniques is very important cultivation as it saves money and time. As technology advances, cultivation techniques have also changed and new ways have emerged.
TABLE 6.6

CLASSIFICATION OF BORROWERS AND NON-BORROWERS BASED ON MODERN TECHNIQUES OF AGRICULTURAL CULTIVATION

<table>
<thead>
<tr>
<th>Modern Techniques</th>
<th>Borrower</th>
<th></th>
<th>Non Borrower</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>125</td>
<td>83%</td>
<td>119</td>
<td>79%</td>
<td>244</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>17%</td>
<td>31</td>
<td>21%</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100%</td>
<td>150</td>
<td>100%</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: Primary Data.

The data shows that a high percentage of borrowers and non-borrowers are using modern techniques of irrigation. It is clear that 83 per cent of the borrowers have used their money to purchase modern tools for irrigation as compared to 79 per cent of non-borrowers. The data reveals that farmers are adopting modern techniques to increase their revenue.

6.2.7 Credit Amount

Beneficiaries approach the bank for credit to meet their urgent needs. The credit so obtained is not only used for productive purposes but also it is also used for unproductive purposes. Table 6.6 shows the credit utilisation of the borrowers in the study area.
### TABLE 6.7

**CLASSIFICATION OF BORROWERS ON THE BASIS OF CREDIT AMOUNT**

<table>
<thead>
<tr>
<th>Credit Amount (Rs.)</th>
<th>Borrower Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10000</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>10000-20000</td>
<td>89</td>
<td>59</td>
</tr>
<tr>
<td>20000-30000</td>
<td>40</td>
<td>27</td>
</tr>
<tr>
<td>30000-40000</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Above 40000</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Primary Data.*  
*Average Loan: Borrowers = Rs.21696.67.*

Among the 150 sample borrowers 63 per cent (95 borrowers) have enjoyed loan facilities of less than Rs.20000, 27 per cent (40 borrowers) have borrowed loan amount between Rs.20001-30000 and only 3 per cent (4 borrowers) have received loan facility above Rs.40000. The average loan amount per borrower is Rs.21696.67.

#### 6.2.8 Annual Income

The total annual income of the sample respondents is taken into account to see their economic status. Income is a major determinant of a person’s standing in the society as well as his well being and his families' well being.
### TABLE 6.8
CLASSIFICATION OF BORROWERS AND NON-BORROWERS ON THE BASIS OF TOTAL ANNUAL INCOME

<table>
<thead>
<tr>
<th>Total Annual Income</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>0 - 50000</td>
<td>24</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>50000 - 100000</td>
<td>54</td>
<td>36</td>
<td>62</td>
</tr>
<tr>
<td>100000 - 150000</td>
<td>38</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>150000 - 200000</td>
<td>22</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>200000 and above</td>
<td>12</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary Data.
Average Annual Income: Borrowers = Rs.97273.40, Non-Borrowers = Rs.96085.67.

The average annual income of borrowers and non-borrowers is Rs.97273.40 and 96085.67. This shows that the sample respondents are better off economically. These people could be said to be above the poverty line if we consider the UN benchmark of $2 a day. The results show that 52 per cent of the borrowers come under the income bracket of Rs.50000 to 100000 while 59 per cent of the non-borrowers come under the same income bracket. Overall 77 per cent of the borrowers’ annual income come under Rs.150000 and 83 per cent of the non-borrowers’ income comes under Rs.150000. The borrowers are comparatively better placed in relation to their total income as more percentage of borrowers are having higher income than non-borrowers.
6.3 Impact of Agricultural Credit on Agricultural Production

The main objective of primary agricultural credit co-operative societies is to grant short term agricultural credit to farmers to meet their working capital requirements whereby agricultural output can be increased together with the economic and social well being of the farmers and members of their family.

Short term agricultural credit has a direct impact on agricultural production which includes the cultivation of perennial crops like coconut and seasonal food crops like paddy, tapioca, fruits and vegetables, pulses, pepper, ginger, turmeric etc. Coconut is a widely cultivated perennial crop and among food crops, except paddy, tapioca and banana other crops are seldom grown. Hence the measurement of the impact of credit on all the crops cultivated in the area seems difficult because all the crops may not be cultivated during the study period. Thus the scope and span of the study is limited to certain agricultural produce only. Therefore only four major crops, one from the perennial crops, namely coconut and three from the seasonal food crops viz., paddy, tapioca and banana are selected for an indepth analysis of the impact of credit on their cultivation. The impact of credit on borrowers is measured in comparison with the performance of non-borrowers or the control group.
Average output per acre of the crops is taken into consideration for the purpose of analysis and comparison.

### 6.3.1 Impact on Production of Paddy

The data on output of paddy shows that there is no impact of credit on production of paddy. The average output of paddy per acre of borrowers is 13.98 per cent (1.4 quintals) less than that of non-borrowers (Table 6.9). By applying the ‘t’ test this difference in average output is statistically not significant at 5 per cent level as the table value (1.96) is higher than the calculated value (0.42).

#### TABLE 6.9

TALUK-WISE DISTRIBUTION OF AVERAGE OUTPUT OF PADDY OF BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Borrowers</th>
<th>Non Borrowers</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aghosteswaram</td>
<td>8.30</td>
<td>11.08</td>
<td>-2.78</td>
<td>33.49</td>
<td>0.39</td>
</tr>
<tr>
<td>Villanvancode</td>
<td>8.94</td>
<td>12.17</td>
<td>-3.23</td>
<td>36.12</td>
<td>0.62</td>
</tr>
<tr>
<td>Thovalai</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>13.69</td>
<td>8.56</td>
<td>5.12</td>
<td>37.37</td>
<td>1.84</td>
</tr>
<tr>
<td>Aggregate</td>
<td>10.01</td>
<td>10.41</td>
<td>-1.4</td>
<td>13.98</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Note: 100 Kg = 1 Quintal.
Source: Primary Data.
Taluk wise (Table 6.9) analysis of the average production of paddy per acre of farmers shows that the output of borrowers in the Agasteeswaram taluk is more than that of non-borrowers. The production of paddy of borrowers is 8.3 quintals per acre. While it is 11.08 quintals in the case of non-borrowers an increase of 2.78 quintals i.e. 33.49 per cent more than that of borrowers. But this difference is statistically not significant as the table value (1.96) is higher than the ‘t’ value of 0.39. In the Vilavancode taluk the output of farmers who borrow for paddy cultivation is less than that of non-borrowers. Production of borrowers is only 8.94 quintals per acre whereas it is 12.17 quintals in the case of non-borrowers a difference of 3.23 quintals (36.12 per cent). But this is also not significant statistically. There is a positive impact on the output of paddy in the Kalkulam taluk. The production of paddy per acre of borrowers is more (5.12 quintals) than that of non-borrowers and the difference is also not significant statistically.

6.3.2 Impact on Production of Tapioca

Contrary to the production of paddy on which credit shows an impact when measured statistically in taluk wise, the production of tapioca exhibits positive results. The average production of tapioca per acre of borrowers is more than the average output of tapioca of non-borrowers (Table 6.10). The average output of borrowers is 33.72 per cent
more than the output of non-borrowers. But this positive difference in the mean output of tapioca is, applying ‘t’ test, statistically not significant as the Table value (1.96) is higher than the calculated value 1.10.

**TABLE 6.10**

**TALUK-WISE DISTRIBUTION OF AVERAGE OUTPUT OF TAPIOCA OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Average Output Tapioca (Quintals per Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Borrowers</td>
</tr>
<tr>
<td>Agestheswaram</td>
<td>59.30</td>
</tr>
<tr>
<td>Villanvancode</td>
<td>53.53</td>
</tr>
<tr>
<td>Thovalai</td>
<td>NA</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>22.87</td>
</tr>
<tr>
<td>Aggregate</td>
<td>56.09</td>
</tr>
</tbody>
</table>

**Note**: 100 Kg = 1 Quintal.

**Source**: Primary Data.

Table 6.10 shows the taluk wise output of tapioca of borrowers and non-borrowers. The Agasteeswaram taluk shows negative difference between means of output of non-borrowers which is 84.65 per cent higher than that of borrowers. This difference in the mean output of tapioca is statistically not significant as the calculated ‘t’ value is less than the table value. In the Vilavancode taluk the production of tapioca of borrowers is higher by 22 quintals per acre which is 41.09 per cent higher
than the production of non-borrowers. This positive impact is also not statistically significant. In the Kalkulam taluk, the output of borrowers is 22.87 quintals per acre, where as it is 20.06 quintals in the case of non-borrowers. The production of borrowers is higher by 12.27 per cent over the production of non-borrowers and this increase is also not statistically significant.

6.3.3 Impact on Production of Banana

As regards to the production of banana, the average output is more by non-borrowers than by borrowers. The average output of banana produced by non-borrowers is 52.11 quintals per acre, while it is 38.46 by borrowers, which is 35.50 per cent higher than the production of borrowers (Table 6.11). This numerical increase is not statistically significant as the table value (1.96) is higher than the calculated value (1.08).
TABLE 6.11

TALUK-WISE DISTRIBUTION OF AVERAGE OUTPUT OF BANANA OF BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Borrowers</th>
<th>Non Borrowers</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agasteeswaram</td>
<td>80.47</td>
<td>85.99</td>
<td>-5.53</td>
<td>-6.87</td>
<td>0.14</td>
</tr>
<tr>
<td>Villanvancode</td>
<td>23.26</td>
<td>45.06</td>
<td>-21.80</td>
<td>-93.72</td>
<td>1.08</td>
</tr>
<tr>
<td>Thovalai</td>
<td>49.49</td>
<td>55.63</td>
<td>-6.13</td>
<td>-12.39</td>
<td>0.20</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>29.84</td>
<td>30.40</td>
<td>-0.57</td>
<td>-1.89</td>
<td>0.03</td>
</tr>
<tr>
<td>Aggregate</td>
<td>38.46</td>
<td>52.11</td>
<td>-13.65</td>
<td>-35.50</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Note: 100 Kg = 1 Quintal.
Source: Primary Data.

Taluk wise distribution of the average output of banana is presented in Table 6.11. This shows that in all the taluks, the output of non-borrowers is more than the output of borrowers. The average output of non-borrowers in Agasteeswaram taluk is higher by 5.53 quintals which is 6.87 per cent more than the output of borrowers and this is statistically not significant. In the Vilavancode taluk very high negative difference is seen between the two group of farmers. The average output of non-borrowers is 45.06 quintals while it is 22.26 in case of borrowers, which is 93.72 per cent more than the output of borrowers. This negative difference is also not statistically significant. The negative impact in the Thovalai taluk where the production of non-borrowers is 55.63 quintals whereas it is
49.49 in the case of borrowers showing the difference of 6.13 quintals (12.39 per cent). No statistical significance is found in this difference as calculated value of 1.08 is lesser than the table value of 1.96. The average output of non-borrowers in Kalkulam taluk is higher by 0.57 quintals which is 1.89 per cent more than the output of borrowers and this is statistically not significant. Comparing the Kalkulam taluk with the Thovalai, Vilavancode, Agasteeswaram the impact of credit is higher in the Kalkulam taluk.

6.3.4 Impact on Production of Coconut

Among perennial crops the product taken into consideration for intensive study in respect of its impact on production is coconut. From the data on production of coconut, it is seen that the production of coconut by the borrowers is more than by non-borrowers (table 6.12). The mean output of borrowers is 4647 coconut per acre as against 3986 coconut per acre in the case of non-borrowers. This shows a positive difference of 14.22 per cent which is around 661 coconut more than non-borrowers. The positive difference in mean output of coconut is statistically not significant, as the tabular value of 1.96 is higher than the calculated value of 0.48.
Table 6.12 displays the taluk wise distribution of average production of coconut. It shows that in the Agasteeswaram taluk the production of borrowers is higher than that of non-borrowers by around 7.94 per cent. Similarly in the Thovalai taluk the production by borrowers is higher than non-borrowers by 18.79 per cent respectively. A lower production of coconut is noticed in Vilavancode taluk where the production of coconut by borrowers is only 1294 as against 3435 in the case of non-borrowers, but still the negative difference is not statistically significant. The position is different in Kalkulam taluk where the output of borrowers is more than the output of non-borrowers by 2020 coconut which is 47.79 per cent more than the output of non-borrowers. This positive difference is
statistically not significant as the calculated ‘t’ value (1.37) is lesser than the tabular value (1.96).

From the above analysis it is seen that among the four crops selected for detailed investigation, the output of borrowers of paddy and banana is quantitatively less than the output of non-borrowers. But the output of tapioca and coconut of borrowers is slightly more than the output of non-borrowers. However these positive difference in output is not statistically significant. So it is safer to conclude that, in general short-term agricultural credit granted by PACB to the agriculturists has not made any significant impact on agricultural production.

6.4 Impact of Agricultural Credit on Agricultural Income

Another important objective of the study is to measure the impact of credit on the income of the beneficiaries of PACBs. For analysing this impact, the average income from all sources and income from agriculture occupation are asserted. While calculating the average income, only gross income is taken into account. The net income could not be worked out as the cost data are not available nor reliable.

6.4.1 Talukwise Impact on Annual Agricultural Income

The average annual income of the borrowers is Rs.70976.13 while that of non-borrowers is Rs.69939.33 (Table 6.13). This shows that
the average annual income of borrowers is high of Rs.1036.80, i.e. by 1.46 per cent. The difference is statistically not significant as the table value of 1.96 at 5 per cent level is higher than the calculated value of 0.247.

**TABLE 6.13**

**TALUK-WISE DISTRIBUTION OF AVERAGE ANNUAL AGRICULTURAL INCOME OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Average Annual Agriculture Income (in Rs.)</th>
<th>Borrowers (Rs.)</th>
<th>Non Borrowers (Rs.)</th>
<th>Average Difference (Rs.)</th>
<th>Average Difference in %</th>
<th>t Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agestheswaram</td>
<td></td>
<td>50932.96</td>
<td>54898.89</td>
<td>-3965.93</td>
<td>-7.79</td>
<td>.615</td>
</tr>
<tr>
<td>Villanvancode</td>
<td></td>
<td>71513.01</td>
<td>71585.15</td>
<td>-72.13</td>
<td>-0.10</td>
<td>.012</td>
</tr>
<tr>
<td>Thovalai</td>
<td></td>
<td>65108.13</td>
<td>57465.63</td>
<td>7642.50</td>
<td>11.74</td>
<td>1.077</td>
</tr>
<tr>
<td>Kalkulam</td>
<td></td>
<td>86323.46</td>
<td>82599.74</td>
<td>3723.72</td>
<td>4.31</td>
<td>.338</td>
</tr>
<tr>
<td>Aggregate</td>
<td></td>
<td>70976.13</td>
<td>69939.33</td>
<td>1036.80</td>
<td>1.46</td>
<td>0.247</td>
</tr>
</tbody>
</table>

Source: Primary Data.

* Significant at 5 per cent level.

Analysis of the taluk wise income data of borrowers of PACBs and of non-borrowers (Table 6.13) shows that the average annual income of borrowers is higher than that of non-borrowers in Thovalai and Kalkulam taluk. The income is by 11.74 per cent and 4.31 per cent. This
differences are statistically not significant as the table value is higher than the calculated value. In the Agasteeswaram and Vilavancode taluks, the average annual income of borrowers is less by 7.79 per cent and 0.10 per cent respectively. The reduced income of borrowers in two taluks are not statistically significant. The calculated ‘t’ values are (.615 and .012) less than the table value 1.96.

6.4.2 Society wise Impact on Agricultural Income

Table 6.14 shows the society wise analysis of the average annual agricultural income of the agriculturists. The average annual income of the borrowers of Mylady PACBs is less than the non-borrowers; and in the Kottaram PACB the average annual income of borrowers is higher than the non-borrowers. But this average annual income is statistically significant.
TABLE 6.14
SOCIETY-WISE DISTRIBUTION OF AVERAGE ANNUAL AGRICULTURAL INCOME OF BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>PACBs</th>
<th>Borrowers</th>
<th>Non Borrowers</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mylady</td>
<td>34441.67</td>
<td>74091.67</td>
<td>-39650.00</td>
<td>-115.12</td>
<td>3.761*</td>
</tr>
<tr>
<td>Kottaram</td>
<td>50933.33</td>
<td>31350.00</td>
<td>19583.33</td>
<td>38.45</td>
<td>2.392*</td>
</tr>
<tr>
<td>Maravankudieripu</td>
<td>71510.00</td>
<td>61960.00</td>
<td>9550.00</td>
<td>13.35</td>
<td>.825</td>
</tr>
<tr>
<td>Parakkai</td>
<td>52731.67</td>
<td>56111.67</td>
<td>-3380.00</td>
<td>-6.41</td>
<td>.243</td>
</tr>
<tr>
<td>Putheri</td>
<td>47250.00</td>
<td>50787.50</td>
<td>-3537.50</td>
<td>-7.49</td>
<td>.208</td>
</tr>
<tr>
<td>Brammapuram</td>
<td>75187.50</td>
<td>60193.33</td>
<td>14994.17</td>
<td>19.94</td>
<td>.679</td>
</tr>
<tr>
<td>Madathattuvilai</td>
<td>58867.14</td>
<td>68021.43</td>
<td>-9154.29</td>
<td>-15.55</td>
<td>.480</td>
</tr>
<tr>
<td>Neyyoor</td>
<td>74492.86</td>
<td>72178.57</td>
<td>2314.29</td>
<td>3.11</td>
<td>.353</td>
</tr>
<tr>
<td>Pallapallam</td>
<td>69108.33</td>
<td>43840.00</td>
<td>25268.33</td>
<td>36.56</td>
<td>1.836</td>
</tr>
<tr>
<td>Paraicode</td>
<td>79021.88</td>
<td>97875.00</td>
<td>-18853.13</td>
<td>-23.86</td>
<td>2.078*</td>
</tr>
<tr>
<td>Muttaicadu</td>
<td>54348.57</td>
<td>47865.71</td>
<td>6482.86</td>
<td>11.93</td>
<td>.490</td>
</tr>
<tr>
<td>Andoor</td>
<td>48512.00</td>
<td>83610.00</td>
<td>-35098.00</td>
<td>-72.35</td>
<td>1.981*</td>
</tr>
<tr>
<td>Kannanoor</td>
<td>77611.88</td>
<td>69151.88</td>
<td>8460.00</td>
<td>10.90</td>
<td>.403</td>
</tr>
<tr>
<td>Manakavilai</td>
<td>84822.86</td>
<td>83776.07</td>
<td>1046.79</td>
<td>1.23</td>
<td>.052</td>
</tr>
<tr>
<td>Azahiapandiapuram</td>
<td>59475.45</td>
<td>62372.73</td>
<td>-2897.27</td>
<td>-4.87</td>
<td>.349</td>
</tr>
<tr>
<td>Thittuvilai</td>
<td>77500.00</td>
<td>46670.00</td>
<td>30830.00</td>
<td>39.78</td>
<td>5.761*</td>
</tr>
<tr>
<td>Chankai</td>
<td>67200.00</td>
<td>64590.00</td>
<td>2610.00</td>
<td>3.88</td>
<td>.370</td>
</tr>
<tr>
<td>Nattallam</td>
<td>64975.00</td>
<td>69532.00</td>
<td>-4557.00</td>
<td>-7.01</td>
<td>.390</td>
</tr>
<tr>
<td>Unnamalaikadai</td>
<td>62638.33</td>
<td>70441.67</td>
<td>-7803.33</td>
<td>-12.46</td>
<td>.309</td>
</tr>
<tr>
<td>Pacode</td>
<td>99126.00</td>
<td>98305.00</td>
<td>821.00</td>
<td>0.83</td>
<td>.031</td>
</tr>
<tr>
<td>Velavancode</td>
<td>113087.50</td>
<td>110092.50</td>
<td>2995.00</td>
<td>2.65</td>
<td>.062</td>
</tr>
<tr>
<td>Ireneapuram</td>
<td>61825.00</td>
<td>66425.00</td>
<td>-4600.00</td>
<td>-7.44</td>
<td>.166</td>
</tr>
<tr>
<td>Kunnathoor</td>
<td>117700.00</td>
<td>83933.33</td>
<td>33766.67</td>
<td>28.69</td>
<td>.818</td>
</tr>
<tr>
<td>Aggregate</td>
<td>70976.13</td>
<td>69939.33</td>
<td>1036.80</td>
<td>1.46</td>
<td>0.247</td>
</tr>
</tbody>
</table>

Source: Primary Data.
* Significant at 5 per cent value.
In the Rajakkamangalam block out of three PACBs studied, the average annual income of borrowers of Maravankudieruppu PACB is higher by 13.35 per cent than that of the non-borrowers. The increase though considerable in money terms, it is not statistically significant. The income of the borrowers of Parakai PACB is less than the income of non-borrowers. In the Kurunthencode block out of four PACBs studied, the income of borrowers of Brammapuram PACB, Neyyoor PACB and Pallapallam PACBs are higher than the income of non-borrowers by 19.94 per cent, 3.11 per cent and 36.56 per cent respectively. The average income of the borrowers of Madathattuvilai PACBs is less than the income of non-borrowers. But the difference is not statistically significant. In the Thuckalay block, out of two PACBs studied, the income of the borrowers of Paraicode PACB is less than the income of the non-borrowers by 23.86 per cent. But the difference is statistically significant in Muttaicadu PACB, where the income of borrowers is higher than the income of non-borrowers by 11.93 per cent. But the difference is not statistically significant. In the Thiruvattar block, out of three PACBs studied, the income of the borrowers of Andoor PACB is less than the income of non-borrowers by 72.35 per cent. But the difference is statistically significant. The income of the borrowers of Kannanoor PACB and Manakavilai and PACB are higher than the income of non-borrowers by 10.90 per cent, 1.23 per cent respectively. But the differences of two PACBs are not
statistically significant. The average annual income of the borrowers of Azhahiapandiapuram PACB is less than the income of the non-borrowers by 4.87 per cent and Thittuvilai PACB is higher than the income of non-borrowers by 39.78 per cent. The difference is statistically significant. In the Killioor block out of three PACBs studied the average annual income of borrowers of Chankai PACB is higher by 3.88 per cent than that of non-borrowers. The income of borrowers of Nattalam PACB and Unnamalaikadai PACBs are less than of the non-borrowers by 7.01 per cent and 12.46 per cent. In the Melpuram block out of two PACBs are studied. The annual average income of borrowings of Pacode PACB and Vilavancode PACB are higher by 0.83 per cent, 2.65 per cent. In the Munchirai block out of two PACBs studied the average annual income of borrowers by 7.44 per cent and Kunnathoor block is higher by 28.69 per cent than that of non-borrowers. But the differences are not statistically significant.

6.4.3 Impact of Income on the Size of Land holdings

The agricultural income data are examined in the basis of the size of land holding of the borrowers and non-borrowers. The details of the analysis given in table 6.15 show the income of borrowers and non-borrowers belonging to marginal, small, medium and big farmers.
### TABLE 6.15

**LAND HOLDING-WISE DISTRIBUTION OF AVERAGE ANNUAL AGRICULTURAL INCOME OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Land Holdings in Acres</th>
<th>Average Annual Agriculture Income</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Borrowers (Rs.)</td>
<td>Non Borrowers (Rs.)</td>
<td>Average Difference</td>
<td>Average Difference in %</td>
<td>t Statistics</td>
</tr>
<tr>
<td>0 - 1</td>
<td>32896.47</td>
<td>46594.67</td>
<td>-13698.20</td>
<td>-41.64</td>
<td>1.46</td>
</tr>
<tr>
<td>1 - 2</td>
<td>51350.36</td>
<td>51377.54</td>
<td>-27.18</td>
<td>-0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>2 - 3</td>
<td>88976.20</td>
<td>85498.93</td>
<td>3477.27</td>
<td>3.91</td>
<td>0.59</td>
</tr>
<tr>
<td>Above 3</td>
<td>139676.54</td>
<td>128480.38</td>
<td>11196.15</td>
<td>8.02</td>
<td>0.50</td>
</tr>
<tr>
<td>Aggregate</td>
<td>70976.13</td>
<td>69939.33</td>
<td>1036.80</td>
<td>1.46</td>
<td>0.247</td>
</tr>
</tbody>
</table>

**Source:** Primary Data.

The table 6.15 shows that the agricultural income of borrowers belonging to marginal and small farmers whose landholdings are less than two acres have less income than that of the corresponding non-borrowing groups. The difference in income is seen increasing with increase in the size of landholdings. It is lowest among marginal farmers whose landholdings are less than one acre and highest among big farmers whose landholdings are more than three acres. The negative difference in the first group i.e. marginal farmers is not statistically significant. Even in the case of big farmers the positive difference of Rs.11196.15 i.e. 8.02 per cent is also not statistically significant.
The data on total average annual agricultural income of borrowers and non-borrowers show that the mean income of borrowers is more than that of non-borrowers. The average income of borrowers is 70,976.13 and that of non-borrowers is Rs.69,393.33. But in the previous analysis it has been seen that the output of borrowers is less than that of non-borrowers in paddy and banana. Therefore, overall it can be concluded that higher income is a result of large output of coconut and tapioca.

6.5 Impact of Agricultural Credit on Employment

Poverty in general is by and large associated with large scale unemployment and under employment particularly in rural and backward areas. One of the objectives of short term agricultural credit supplied by PACBs is the generation of gainful employment to the rural people by increasing agricultural production and income. This part of the study analyses the impact of short term agricultural credit granted by PACBs on this vital aspect of generating employment. For analysing the impact of credit on employment the average annual mandays of employment is taken into consideration, while calculating the average annual mandays of employment eight hours of work per day per worker is regarded as one manday.
The survey reveals that, in general, there is no increase of mandays of work among the borrowers. The average mandays of employment of the borrowers in a year is 149 days while those of non-borrowers are 152 showing a decrease of 3 mandays (i.e. 1.91 per cent) (Table 6.16). This shortage is statistically not significant as the calculated value is less than the tabular value.

### 6.5.1 Taluk wise Impact on Average Mandays of Employment

Taluk wise distribution of average mandays of employment (Table 6.16) shows that in all the taluks there is shortage of mandays of employment of borrowers. The difference in shortage of mandays of employment of borrowers is not statistically significant for all the four taluks.

#### TABLE 6.16

**TALUK-WISE DISTRIBUTION OF AVERAGE ANNUAL MAN DAYS OF EMPLOYMENT OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Average Annual Man Days of Employment</th>
<th>Borrowers</th>
<th>Non Borrowers</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agasteswaram</td>
<td>119.56</td>
<td>122.15</td>
<td>-2.59</td>
<td>-2.17</td>
<td>.304</td>
<td></td>
</tr>
<tr>
<td>Villanvancode</td>
<td>146.16</td>
<td>148.71</td>
<td>-2.54</td>
<td>-1.74</td>
<td>.687</td>
<td></td>
</tr>
<tr>
<td>Thovalai</td>
<td>163.25</td>
<td>165.81</td>
<td>-2.56</td>
<td>-1.57</td>
<td>.193</td>
<td></td>
</tr>
<tr>
<td>Kalkulam</td>
<td>168.72</td>
<td>172.38</td>
<td>-3.67</td>
<td>-2.17</td>
<td>.718</td>
<td></td>
</tr>
<tr>
<td>Aggregate</td>
<td>149.06</td>
<td>151.91</td>
<td>-2.85</td>
<td>-1.91</td>
<td>0.964</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data.
* Significant at 5 per cent level.
Taluk-wise distribution of average mandays of employment (Table 6.16) shows that in all four taluks i.e. Agasteeswaram, Vilavancode, Thovalai and Kalkulam there is shortage of mandays of borrowers by 2.17 per cent, 1.74 per cent, 1.57 per cent and 2.17 per cent respectively as compared with the mandays of employment of non-borrowers. This negative impact is statistically not significant as the calculated ‘t’ test value is 0.964 which is less than the tabular value of 1.96 at 5 per cent level of significance.

6.5.2 Society wise Impact on Average Mandays of Employment

The data on mandays of employment processed society wise (Table 6.17) shows that the mean mandays of employment of the borrowers of the Mylaudy society from Agasteeswaram taluk is more than that of the non-borrowers. The difference is higher in Putheri and Irenepuram. The mean mandays of employment of borrowers in Putheri society is 175 mandays as against 224 mandays of employment of non-borrowers showing a marked difference of 49 days which is 28.14 per cent less than those of non-borrowers. However, the difference is statistically not significant as the calculated value is less than the table value. The average mandays of employment of borrowers and of non-borrowers of Paraicode are 151 and 167 days respectively. The decrease in the average mandays of employment on the part of borrowers is 16 i.e. 10.33 per cent
less than in the case of non-borrowers. The difference in mean mandays is also not statistically significant.

### TABLE 6.17

SOCIETY-WISE DISTRIBUTIONS OF AVERAGE ANNUAL MAN DAYS OF EMPLOYMENT OF BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>PACBs</th>
<th>Average Annual Man Days of Employment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Borrowers</td>
<td>Non Borrowers</td>
<td>Average Difference</td>
<td>Average Difference in %</td>
</tr>
<tr>
<td>Mylady</td>
<td>155.00</td>
<td>132.50</td>
<td>22.50</td>
<td>14.52</td>
</tr>
<tr>
<td>Kottaram</td>
<td>104.17</td>
<td>99.33</td>
<td>4.83</td>
<td>4.64</td>
</tr>
<tr>
<td>Maravankudieripu</td>
<td>96.60</td>
<td>104.00</td>
<td>-7.40</td>
<td>-7.66</td>
</tr>
<tr>
<td>Parakkai</td>
<td>81.67</td>
<td>81.67</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Putheri</td>
<td>175.00</td>
<td>224.25</td>
<td>-49.25</td>
<td>-28.14</td>
</tr>
<tr>
<td>Brammapuram</td>
<td>128.33</td>
<td>124.17</td>
<td>4.17</td>
<td>3.25</td>
</tr>
<tr>
<td>Madathattuvilai</td>
<td>108.57</td>
<td>112.86</td>
<td>-4.29</td>
<td>-3.95</td>
</tr>
<tr>
<td>Neyyoor</td>
<td>134.29</td>
<td>126.43</td>
<td>7.86</td>
<td>5.85</td>
</tr>
<tr>
<td>Pallapallam</td>
<td>111.67</td>
<td>102.50</td>
<td>9.17</td>
<td>8.21</td>
</tr>
<tr>
<td>Paracode</td>
<td>151.25</td>
<td>166.88</td>
<td>-15.63</td>
<td>-10.33</td>
</tr>
<tr>
<td>Muttaicadu</td>
<td>160.00</td>
<td>162.86</td>
<td>-2.86</td>
<td>-1.79</td>
</tr>
<tr>
<td>Andoor</td>
<td>158.60</td>
<td>170.00</td>
<td>-11.40</td>
<td>-7.19</td>
</tr>
<tr>
<td>Kannanoor</td>
<td>155.75</td>
<td>169.38</td>
<td>-13.63</td>
<td>-8.75</td>
</tr>
<tr>
<td>Manakavilai</td>
<td>173.57</td>
<td>171.21</td>
<td>2.36</td>
<td>1.36</td>
</tr>
<tr>
<td>Azahiapandiapuram</td>
<td>157.00</td>
<td>154.36</td>
<td>2.64</td>
<td>1.68</td>
</tr>
<tr>
<td>Thittuvilai</td>
<td>177.00</td>
<td>191.00</td>
<td>-14.00</td>
<td>-7.91</td>
</tr>
<tr>
<td>Chankai</td>
<td>172.50</td>
<td>180.00</td>
<td>-7.50</td>
<td>-4.35</td>
</tr>
<tr>
<td>Nattallam</td>
<td>174.00</td>
<td>165.00</td>
<td>9.00</td>
<td>5.17</td>
</tr>
<tr>
<td>Unnamalaikadai</td>
<td>182.50</td>
<td>173.33</td>
<td>9.17</td>
<td>5.02</td>
</tr>
<tr>
<td>Pacode</td>
<td>175.50</td>
<td>179.00</td>
<td>-3.50</td>
<td>-1.99</td>
</tr>
<tr>
<td>Velavan code</td>
<td>173.75</td>
<td>177.50</td>
<td>-3.75</td>
<td>-2.16</td>
</tr>
<tr>
<td>Irenepuram</td>
<td>116.25</td>
<td>160.00</td>
<td>-43.75</td>
<td>-37.63</td>
</tr>
<tr>
<td>Kunnathoor</td>
<td>168.33</td>
<td>166.33</td>
<td>2.00</td>
<td>1.19</td>
</tr>
<tr>
<td>Aggregate</td>
<td>149.06</td>
<td>151.91</td>
<td>-2.85</td>
<td>-1.91</td>
</tr>
</tbody>
</table>

* Significant at 5 per cent level.
For this study, two societies, namely Mylaudy and Kottaram PACBs are selected in the Agasteeswaram block. The data on mandays of employment processed block-wise (table 6.7) shows that the mean mandays of employment of the borrowers of the Mylaudy PACB are 155 and 104 in Kottaram PACB respectively. In the case of non-borrowers the mean mandays are 132.50 and 99.33 respectively. The difference is higher both in Mylaudy and in Kottaram PACBs. The difference arises as 22.50 days and 4.83 days which clearly show the difference of 14.52 per cent in Mylaudy and 4.64 in Kottaram respectively. Thus the borrowers are more than the non-borrowers. However, statistically the difference is not significant.

In Rajakkamangalam block; three PACBs are selected for the study. The PACBs selected are Maravankudieruppu, Parakkai, Putheri. In the Parakkai PACB, the mean mandays of borrowers and non-borrowers are equal and so it finds no difference. But in the case of Maravankudieruppu and Putheri PACBs the mean mandays of the non-borrowers are more in number than the borrowers, 104 and 224.25 respectively. The borrowers are 26.60 and 175 in number both in Maravankudieruppu and Putheri respectively. Thus the average differences calculated are 7.40 and 49.25 respectively and 7.66 per cent and 21.14 per cent.
However, statistically the difference arrived at the Maravankudieruppu PACB is not significant whereas in the case of Putheri PACB, statistically it is significant.

In the Kurunthencode block, four PACBs are selected namely Brammapuram, Madathattuvilai, Neyyoor and Palapallam. Among the above-said four PACBs, in Madathattuvilai, the mandays of borrowers is less than the non-borrowers. The average difference is calculated at 4.29. The difference per outage is arrived at 3.95. Thus the difference is statistically not significant.

In the Bramapuram, Neyyoor and Palappallam PACBs, the average mean mandays of borrowers are higher than the non-borrowers. 128.33, 134.29 and 111.67 mandays of the borrowers, and the average mean mandays of the non-borrowers are 124.17, 126.43 and 102.50 respectively. This shows that 4.17, 7.86 and 9.14 are the average difference. Accordingly, the percentage arrived are 3.25, 5.85 and 8.21. In fact, the difference in all the four PACBs is statistically not significant because the calculated value is less than the tabular value of 1.96.

In the Thuckalay block, two PACBs namely Paraicode and Muttaicadu are selected. In both the above banks, the mandays of borrowers are less than the non-borrowers. The number of average mandays is 151.25 and 160 respectively. The number of average mandays
of non-borrowers is 166.88 and 162.85 respectively. The average
difference is 15.63 and 2.86 respectively. Thus, the average difference in
percentage is 10.33 and 1.79 respectively. The difference is statistically
significant in Paraicode PACB and the difference is statistically not
significant in Muttaicadu PACB.

Altogether three PACBs namely Andoor, Kannanoor and
Manakkavilai are selected in the Thiruvattar Block. In the first two
PACEs, namely Andoor and Kannanoor, the mean mandays of
employment of the borrowers is less than the non-borrowers and the
number of average mandays are 158.60 and 155.75 respectively. The
number of average mandays of non-borrowers 1.70 and 169.38
respectively. Thus the average difference is 11.40 and 13.63 respectively.
So, the average difference is 7.19, 8.75 per cent respectively. However
statistically the difference is not significant. In the Manakkavilai PACB,
the average mandays of employment of borrowers is higher than the non-
borrowers. The average difference in per cent is 2.36. So, the difference is
statistically not significant.

In the Thovalai Block, two PACBs are selected namely
Azhahiapandiypuram and Thittuvinai. In the Azhahiayandiapuram PACB,
the average mandays of employment of borrowers is higher than the non-
borrowers are 157, 154.36 respectively. The average difference in per cent
is 1.68. Thus, statistically the difference is not significant. Likewise, the Thittuvilai PACB, the average mandays of employment of borrowers is less than non-borrowers i.e. 177 and 191 respectively. The average difference is 14. The average difference in percentage is 7.91. Thus the difference is statistically not significant.

In the Killiyoor Block, three PACBs are selected namely Chankai, Nattalam and Unnamalaikadai. Of the three above said PACBs, the average mandays of employment of borrowers is less than the non-borrowers i.e. 172.50 and 180 respectively. The average difference in percentage is 4.35. Thus the statistical difference is not significant. In the case of Nattalam and Unnamalaikadai PACBs, the average mandays of employment of borrowers is higher than the non-borrowers. The number of borrowers in both the Banks is 174 and 182.50 respectively. The non-borrowers are 165 and 173.33 respectively. The average difference is 9 and 9.17 respectively. The average difference in percentage is 5.17 and 5.02 respectively. Thus, statistically the difference is not significant.

In the Melpuram Block, two PACBs are selected, namely Pacode and Vilavancode. In both the Banks, the average mandays of employment of borrowers are less than the non-borrowers, 175.50 and 173.75 respectively and the non-borrowers are 179 and 177.50 respectively. The average difference is 3.50 and 3.75. The difference in percentage is 1.99 and 2.16. Thus, the statistical difference is not significant.
In the Munchirai Block, two PACBs, namely Irenepuram and Kunnathoor, are selected. In Irenepuram Bank, the average mandays of employment of borrowers is less than the non-borrowers, i.e. 116.25 and 160 respectively. The average difference is 43.75. The average difference in per cent is 37.63. Thus, statistically the difference is not significant. In Kunnathoor Bank, the average mandays of employment of borrowers is higher than the non-borrowers, i.e. 168.33 and 166.33 respectively and the average difference is 2. The average difference in per cent is 1.19. Thus statistically the difference is not significant.

After having done the Block-wise study for the nine blocks comprising of 23 PACBs, the following factors are found out. The average annual mandays of employment of borrowers is less than the non-borrowers i.e. 149.06 and 151.91 respectively. Hence, totally the average difference is 2.85 and the average difference in per cent is 1.91. This difference is also found to be statistically not significant since the calculated ‘t’ value 0.964 is less than the tabular value of 1.96.

6.5.3 Land holdings Impact on Average Mandays of Employment

Table 6.18 further classifies the data of mandays of employment on the basis of the size of land holdings of the sample borrowers and non-borrowers. According to this analysis, borrowers of marginal farmers have got more number of days compared to the mandays
of non-borrowers. In the case of small and medium farmers position of borrowers in respect of mandays of employment lower than that of the non-borrowers. In the case of big farmers the position of borrowers in respect of mandays of employment is same as non-borrowers.

**TABLE 6.18**

**LAND HOLDING-WISE DISTRIBUTIONS OF AVERAGE ANNUAL MAN DAYS OF EMPLOYMENT OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>Land Holdings in Acres</th>
<th>Average Annual Man Days of Employment</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Borrowers</td>
<td>Non Borrowers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 1</td>
<td>159.59</td>
<td>159.00</td>
<td>0.59</td>
<td>0.37</td>
</tr>
<tr>
<td>1 – 2</td>
<td>147.36</td>
<td>150.00</td>
<td>-2.64</td>
<td>-1.79</td>
</tr>
<tr>
<td>2 – 3</td>
<td>146.26</td>
<td>153.87</td>
<td>-7.61</td>
<td>-5.20</td>
</tr>
<tr>
<td>Above 3</td>
<td>151.54</td>
<td>151.54</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Aggregate</td>
<td>149.06</td>
<td>151.91</td>
<td>-2.85</td>
<td>-1.91</td>
</tr>
</tbody>
</table>

*Source: Primary Data.*

According to this analysis borrowers who have got land holdings between 2-3 acres have less mean mandays of employment that those of non-borrowers. The decrease in mean mandays of employment of borrowers is 8 days i.e. 5.2 per cent. The difference is statistically not significant. For the analysis it can also be seen that there is no difference in mean mandays of employment of borrowers and non-borrowers who
hold land above 3 acres. It can be concluded that marginal farmers who have borrowed are working for less number of days than non-borrowers of the same category. Very little difference is noticed among the borrowers who hold land between 1 to 2 acres as compared with those of their counterparts in the non-borrowing group. The average mandays of employment of marginal farmers of the borrowers group is 147; while it is 150 days in the case of farmers who hold land between 1 to 2 acres. The difference is only 3 days, or in percentage terms 1.79 per cent more than those of non-borrowers. This difference is statistically not significant.

6.6 Impact of Agricultural Credit on Savings

Another indicator of the impact of credit on the borrowers of PACBs besides production, income and employment generation is savings. The data on average annual savings of borrowers and non-borrowers is analysed in the following section.

The data on average annual savings of borrowers and non-borrowers (Table 6.19) reveal that there is significant increase in the savings of borrowers. The average annual savings of borrowers is Rs.9776 while it is Rs.9247 in the case of non-borrowers showing a marked difference of Rs.529 or 5.41 per cent. However, the positive difference is not statistically significant.
TABLE 6.19
TALUK-WISE DISTRIBUTION OF AVERAGE ANNUAL SAVINGS OF
BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Average Annual Savings</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Borrowers (Rs.)</td>
<td>Non Borrowers (Rs.)</td>
<td>Average Difference</td>
<td>Average Difference in %</td>
</tr>
<tr>
<td>Agasteeswaram</td>
<td>9765.185</td>
<td>8084.259</td>
<td>1680.926</td>
<td>17.21</td>
</tr>
<tr>
<td>Villanvancode</td>
<td>9409.338</td>
<td>9565.147</td>
<td>-155.809</td>
<td>-1.66</td>
</tr>
<tr>
<td>Thovalai</td>
<td>8193.438</td>
<td>7720</td>
<td>473.438</td>
<td>5.78</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>11072.69</td>
<td>10123.85</td>
<td>948.846</td>
<td>8.57</td>
</tr>
<tr>
<td>Aggregate</td>
<td>9776.167</td>
<td>9247.033</td>
<td>529.133</td>
<td>5.41</td>
</tr>
</tbody>
</table>

Source: Primary Data.

6.6.1 Taluk wise Impact on Annual Savings

Taluk wise analysis of data on savings of borrowers and non-borrowers as given in table 6.19 shows that in the Agasteeswaram taluk the average savings of borrowers are more than those of non-borrowers, while in the Vilavancode taluk the average savings of the borrowers are less than those of non-borrowers. In the Thovalai taluk and Kalkulam taluk the average savings of borrowers are more than those of non-borrowers. But all these differences are statistically not significant. The mean annual savings of the borrowers of Agasteeswaram taluk is Rs.9765 which is 17.21 per cent more than the savings of Rs.8084 of non-borrowers. The difference in mean savings is not statistically significant as the calculated
value is less than the tabular value. In the Vilavancode taluk as can be seen from the table; the savings of borrowers is less by Rs.155 which is 1.66 per cent less than those of non-borrowers. The position of the borrowers in Thovalai taluk and Kalkulam taluk is more than those of non-borrowers. Thus, Rs.8193 and Rs.11072 are the average savings of borrowers. And the average annual savings of non-borrowers are Rs.7720 and Rs.10123 respectively. This shows that Rs.473 and Rs.949 are the average difference. Accordingly the percentage arrived at are 5.78 and 8.57. After having done the taluk-wise study, the following factors are found out. The average annual savings of borrowers is higher than the non-borrowers i.e. Rs.9776 and Rs.9247 respectively and the average difference is Rs.529. The average difference in per cent is 5.41. Thus the difference is not statistically significant as calculated ‘t’ test value is 0.875 is less than the tabular value of 1.96 at 5 per cent level of significant.

6.6.2 Society wise Impact on Annual Savings

Society-wise distribution of average annual savings of farmers is presented in table 6.20. The average savings of borrowers is Rs.17543 while that of non-borrowers as Rs.5731.6 i.e. a increase of Rs.11811.6 (67.33 per cent). The positive difference is still not statistically significant.
### TABLE 6.20

**SOCIETY-WISE DISTRIBUTIONS OF AVERAGE ANNUAL SAVINGS OF BORROWERS AND NON-BORROWERS**

<table>
<thead>
<tr>
<th>PACBs</th>
<th>Borrowers (Rs.)</th>
<th>Non Borrowers (Rs.)</th>
<th>Average Difference</th>
<th>Average Difference in %</th>
<th>t Statistics</th>
<th>Source: Primary Data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mylady</td>
<td>5795.833</td>
<td>9783.333</td>
<td>-3987.5</td>
<td>-68.80</td>
<td>2.330*</td>
<td>* Significant at 5 per cent level.</td>
</tr>
<tr>
<td>Kottaram</td>
<td>17543.33</td>
<td>5731.667</td>
<td>11811.67</td>
<td>67.33</td>
<td>1.082</td>
<td></td>
</tr>
<tr>
<td>Maravankudieripu</td>
<td>9600</td>
<td>9240</td>
<td>360</td>
<td>3.75</td>
<td>.233</td>
<td></td>
</tr>
<tr>
<td>Parakkai</td>
<td>7802.5</td>
<td>7886.667</td>
<td>-84.167</td>
<td>-1.08</td>
<td>.094</td>
<td></td>
</tr>
<tr>
<td>Putheri</td>
<td>7202.5</td>
<td>7916.25</td>
<td>-713.75</td>
<td>-9.91</td>
<td>.384</td>
<td></td>
</tr>
<tr>
<td>Brammapuram</td>
<td>9922.5</td>
<td>9979.167</td>
<td>-56.667</td>
<td>-0.57</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td>Madathattuvilai</td>
<td>8487.857</td>
<td>9389.286</td>
<td>-901.429</td>
<td>-10.62</td>
<td>.506</td>
<td></td>
</tr>
<tr>
<td>Neyyoor</td>
<td>9560.714</td>
<td>9750</td>
<td>-189.286</td>
<td>-1.98</td>
<td>.471</td>
<td></td>
</tr>
<tr>
<td>Pallapallam</td>
<td>9216.667</td>
<td>6486.667</td>
<td>2730</td>
<td>29.62</td>
<td>2.181*</td>
<td></td>
</tr>
<tr>
<td>Paraicode</td>
<td>10714.38</td>
<td>11987.5</td>
<td>-1273.13</td>
<td>-11.88</td>
<td>1.120</td>
<td></td>
</tr>
<tr>
<td>Muttaicadu</td>
<td>7255.714</td>
<td>6348.571</td>
<td>907.143</td>
<td>12.50</td>
<td>.627</td>
<td></td>
</tr>
<tr>
<td>Andoor</td>
<td>7634</td>
<td>11438</td>
<td>-3804</td>
<td>-49.83</td>
<td>2.034</td>
<td></td>
</tr>
<tr>
<td>Kannanoor</td>
<td>9503.125</td>
<td>9185</td>
<td>318.125</td>
<td>3.35</td>
<td>.138</td>
<td></td>
</tr>
<tr>
<td>Manakavilai</td>
<td>10568.57</td>
<td>10475</td>
<td>93.571</td>
<td>0.89</td>
<td>.048</td>
<td></td>
</tr>
<tr>
<td>Azahiapandiapuram</td>
<td>7619.545</td>
<td>8026.818</td>
<td>-407.273</td>
<td>-5.35</td>
<td>.560</td>
<td></td>
</tr>
<tr>
<td>Thittuvilai</td>
<td>9456</td>
<td>7045</td>
<td>2411</td>
<td>25.50</td>
<td>4.174*</td>
<td></td>
</tr>
<tr>
<td>Chankai</td>
<td>9022.5</td>
<td>8675</td>
<td>347.5</td>
<td>3.85</td>
<td>.370</td>
<td></td>
</tr>
<tr>
<td>Nattallam</td>
<td>9313</td>
<td>8976</td>
<td>337</td>
<td>3.62</td>
<td>.259</td>
<td></td>
</tr>
<tr>
<td>Unnamalaikadai</td>
<td>8700</td>
<td>8961.667</td>
<td>-261.667</td>
<td>-3.01</td>
<td>.096</td>
<td></td>
</tr>
<tr>
<td>Pacode</td>
<td>12037.5</td>
<td>11742</td>
<td>295.5</td>
<td>2.45</td>
<td>.111</td>
<td></td>
</tr>
<tr>
<td>Velavancode</td>
<td>14080</td>
<td>11195</td>
<td>2885</td>
<td>20.49</td>
<td>1.046</td>
<td></td>
</tr>
<tr>
<td>Irenepuram</td>
<td>8400</td>
<td>8660</td>
<td>-260</td>
<td>-3.10</td>
<td>.096</td>
<td></td>
</tr>
<tr>
<td>Kunmathoor</td>
<td>14447.5</td>
<td>10773.33</td>
<td>3674.167</td>
<td>25.43</td>
<td>.841</td>
<td></td>
</tr>
<tr>
<td>Aggregate</td>
<td>9776.167</td>
<td>9247.033</td>
<td>529.133</td>
<td>5.41</td>
<td>0.875</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 5 per cent level.
In the Rajakkamangalam block out of three PACBs studied, the average annual savings of borrowers of Maravankudieruppu PACB is more than the income of non-borrowers by 3.75 per cent. But the difference is not statistically significant. The average annual savings of borrowers of Parakai PACB and Putheri PACB are less than that of non-borrowers by 1.08 per cent, 9.91 per cent. But the difference is not statistically significant. In Kurunthencode out of four PACBs studied the average annual savings of Brammapuram PACBs, Madathattuvilai PACB and Neyyoor PACBs are lower than the average annual savings of non-borrowers by 0.57 per cent, 10.62 per cent, 1.98 per cent respectively. The average annual savings of Pallappallam PACB is less than the income of non-borrowers by 29.62 per cent. But the difference is statistically significant. In the Thuckalay block out of two PACBs studied, the average annual savings of the borrowers is less than the savings of the non-borrowers by 11.88 per cent. But the difference is not statistically significant and Muttaicodu PACB, higher than the savings of the non-borrowers by 12.50 per cent. But the difference is not statistically significant. In the Tiruvattar block, out of three PACBs studied, the average annual savings of the borrowers of Andoor PACB is less than the savings of the non-borrowers by 49.83 per cent. But the difference is not statistically significant. The average annual savings of the borrowers of Kannanoor PACB and Manakkavilai PACB are higher than the savings of non-borrowers by 3.35 per cent and 0.89 per cent respectively. But the
differences of two PACBs are not statistically significant. In the Thovalai Block out of two PACBs studied the average annual savings of borrowers of Azhahiapandiyanpuram is less than the savings of the non-borrowers by 5.35 per cent and Thittuvilai PACB is higher than the savings of non-borrowers by 25.50 per cent. The difference is statistically significant. In the Killioor Block out of three PACBs studied, the average annual savings of borrowers of Chanka PACB and Nattalam PACB are higher than the savings of non-borrowers by 3.85 per cent and 3.62 per cent. The average annual savings of the borrowers of Unnamalaikadai PACB is less than the savings non-borrowers by 3.01 per cent. But the difference is not statistically significant. In the Melpuram block out of two PACBs studied, the average annual savings of borrowers of Pacode PACB and Vilavancode PACB are higher than of non-borrowers by 2.45 per cent and 20.49 per cent. The difference is not statistically significant. In the Munchirai block out of two PACBs studied, the average annual savings of borrowers of Irenepuram PACB is less than of non-borrowers by 3.10 per cent and Kunnathoor PACB is higher by 25.43 per cent than of non-borrowers. But the difference is not statistically significant.

6.6.3 Size of Land holdings and its Impact on Annual Savings

Average savings of borrowers and non-borrowers are further classified and analysed on the basis of the size of their holdings. The result of the analysis is given in table 6.21. The average savings of farmers who
hold land between 0 to 1 acre and the borrowing group is Rs.5623 while it is Rs.6688 in the case of non-borrowings belonging to the same category of land holdings showing a difference of Rs.1064. The savings of borrowers is 18.94 per cent less than the savings of non-borrowers, which difference is not statistically significant.

**TABLE 6.21**

LAND HOLDING-WISE DISTRIBUTION OF AVERAGE ANNUAL SAVINGS OF BORROWERS AND NON-BORROWERS

<table>
<thead>
<tr>
<th>Land Holdings in Acres</th>
<th>Borrowers (in Rs.)</th>
<th>Non Borrowers (in Rs.)</th>
<th>Average Difference (in Rs.)</th>
<th>Average Difference in %</th>
<th>t Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1</td>
<td>5623.23</td>
<td>6688</td>
<td>-1064.77</td>
<td>-18.94</td>
<td>1.07</td>
</tr>
<tr>
<td>1 - 2</td>
<td>7314.78</td>
<td>7345.656</td>
<td>-30.873</td>
<td>-0.42</td>
<td>0.09</td>
</tr>
<tr>
<td>2 - 3</td>
<td>12491.60</td>
<td>10909.26</td>
<td>1582.338</td>
<td>12.67</td>
<td>1.21</td>
</tr>
<tr>
<td>Above 3</td>
<td>16125.40</td>
<td>15291.15</td>
<td>834.231</td>
<td>5.17</td>
<td>0.33</td>
</tr>
<tr>
<td>Aggregate</td>
<td>9776.16</td>
<td>9247.03</td>
<td>529.13</td>
<td>5.41</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Source: Primary Data.

The average savings of farmers whose land holding size is between 1 to 2 acres of the borrowing group in 0.42 per cent less than the non-borrowing group under the same category of land holdings. There is a negative difference of .09 per cent and this difference is also not statistically significant as the calculated value is less than the tabular value. The average savings of farmers whose land holding size is between 2 to 3
acres of the borrowing group is Rs.12492 while it is Rs.10909 in the case of non-borrowers belonging to the 'same category of land holdings showing a difference of Rs.1582. The savings of borrowers is 12.67 per cent more than the savings of non-borrowers, while difference is not statistically significant. The average annual saving of farmers whose have land above 3 acre of the borrowing group is Rs.16125 while it is Rs.15,291 in the case of non-borrowings belonging to the same category of land holdings showing a difference of Rs.834. The savings of borrowers is 5.17 per cent higher than the savings of non-borrowers, which difference is not statistically significant as the calculated value is less than the table value.

The above analysis leads to the findings that on the whole, the credit provided by PACBs have made some significant impact on the savings of borrowers. This difference is marginal and we can conclude that because of dire poverty and very low income earnings of farmers of the borrowings group their savings are low. But when compared to non-borrowers their savings are better or more.

6.7 Impact on Standard of Living

The economic changes whether positive or negative, consequent on the working of agricultural credit societies will have their reactions on the society in which they work and on the standards of life of
their members, especially on the borrowers or beneficiaries. The changes in the standard of living, if any, take place indifferent shapes and forms. The analysis of these changes is the subject matter of this part of the study. For analysing the changes in the living standards of the borrowers, certain important variables are chosen and the impact of the changes on these variables is compared with the changes in the same variables in respect of non-borrowers. The variables selected to measure the standard of living are:

   a) Education or aspiration to educate children  
   b) Social participation  
   c) Consumption pattern; and  
   d) Entertainment  

The impact of assistance provided by PACBs on each of these four variables is measured with the help of scoring technique.

6.7.1 Education Aspiration

It is common knowledge that economic advancement will not only change the income and employment levels of people, but also their attitudes and aspirations. One such aspiration exhibited by the economic prosperity of the member borrower is the education of their children. Education plays a dominant role in the development of human resources. It also operates as a potent weapon in demolishing traditional beliefs and
customary practices. Scientific outlook and knowledge are necessary for
economic and social progress. The latter fact is particularly significant in
Indian agriculture, the operation of which is still governed by methods that
are antique and equipments that are junk. The wide network of PACBs of
rural and backward areas, directly financing the economic activities of their
members are expected to play the vital role of increasing the latter’s
income and thereby enabling them to consummate their aspirations to the
farthest extent possible.

6.7.1.1 Taluk wise Impact on Education

The level of aspirations of borrowers and non-borrowers in
educating their children is prosecuted in Table 6.22. The table reveals that
there is significant difference existing between borrowers and non-
borrowers in this regard. In the borrower group 28 per cent of the farmers
have a low level of educational desire, 32 per cent have medium level and
40 per cent have high level of educational desire. The corresponding
figures among the non-borrowers are 19 per cent, 24 per cent and 57 per
cent respectively. It can be seen that non-borrowers have a very high level
of educational desire for their children. The difference in the level of
education is also statistically significant as the calculated chi-square value
of 8.405 is higher than the tabular value of 5.99 at 5 per cent level of
significance. This evidently shows the interest of farmers in educating their children and are conscious of the value of education.

**TABLE 6.22**

**TALUK-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF EDUCATION GIVEN TO THEIR CHILDREN**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Borrower</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Actu al</td>
<td>%</td>
<td>Actu al</td>
<td>%</td>
<td>Actu al</td>
<td>%</td>
<td>Actu al</td>
<td>%</td>
<td>Actu al</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Agasteeswaram</td>
<td>12</td>
<td>44</td>
<td>4</td>
<td>11</td>
<td>41</td>
<td></td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>26</td>
<td>38</td>
<td>24</td>
<td>18</td>
<td>26</td>
<td></td>
<td>19</td>
<td>28</td>
<td>18</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Thovalai</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>25</td>
<td>12</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Villanvancode</td>
<td>4</td>
<td>10</td>
<td>16</td>
<td>41</td>
<td>19</td>
<td>49</td>
<td>10</td>
<td>26</td>
<td>13</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>28</td>
<td>48</td>
<td>61</td>
<td>60</td>
<td>40</td>
<td>29</td>
<td>19</td>
<td>36</td>
<td>24</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: Primary Data.
*Significant at 5 per cent level.

As the chi-square value for Agasteeswaram taluk is 16.97 against the tabular value of 5.99, we can conclude that there is significant difference between the level of education given to children of borrowers to that of non-borrowers at 5 per cent level. It means that the null hypothesis that there is no significant difference among borrowers and non-borrowers with respect to the level of children’s education is rejected.

As the chi-square value of Kalkulam taluk is 5.39 against the tabular value of 5.99, we can conclude that there is not significant
difference between the level of education given to children of borrowers to that of non-borrowers at 5 per cent level. It means that the null hypothesis that there is significant different among borrowers and non-borrowers is accepted. As the chi-square value of Thovalai taluk is 0.821 against the tabular value of 5.99, we conclude that there is no significant difference between the level of education given to children of borrowers to that of non-borrowers at 5 per cent level. As the chi-square value of Vilavancode taluk is 3.139 against the tabular value of 5.99, we can conclude that there is not significant difference between the level of education given to children of borrowers to that of non-borrowers at 5 per cent level.

6.7.1.2 Land wise Holding Impact on Education

The distribution of informants according to the size of their land holdings (Table 6.23) shows that the desire to impart better education to their children is higher among who hold land between 2 to 3 acres under borrowers. Among borrowers it is farmers who hold land size between 2 to 3 acres have a high desire to educate their children, whereas among non-borrowers it is farmers who hold land size between 1 to 2 acres have a high desire to educate their children. The corresponding figures among borrowers is 54 per cent and among non-borrowers is 51 per cent.
TABLE 6.23  
LAND HOLDING-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF EDUCATION GIVEN TO THEIR CHILDREN

<table>
<thead>
<tr>
<th>Land Holdings</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Act-ual</td>
<td>%</td>
<td>Act-ual</td>
</tr>
<tr>
<td>0 to 1</td>
<td>5</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>1 to 2</td>
<td>24</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>2 to 3</td>
<td>6</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Above 3</td>
<td>2</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>25</td>
<td>48</td>
</tr>
</tbody>
</table>

Source: Primary Data.
*Significant at 5 % Level.

Among small farmers 37 per cent of borrowers have high level of desire to educate their children, 37 per cent medium level and 26 per cent low level. But 51 per cent of the non-borrowers belonging to the small farmers category have high level of desire to educate their children and 25 per cent and 24 per cent have medium and low level of desire to educate their children. The difference is not statistically significant (chi-square value 0.124). The degree of level of desire to educate their children is more or less identical among marginal, medium and big farmers of the borrowing and non-borrowing group.

The above analysis of the educational aspiration of the farmers reveals that the PACB through granting credit and maintaining
contact with the farmers are not able to make significant impact on the level of aspiration of the borrowers to educate their children. On the whole, the difference between the borrowing and non-borrowers group is statistically not significant (Table 6.23).

6.7.2 Social Participation

Another variable selected for measuring the standard of living of the borrowers is social participation, i.e. participation in cultural and social activities. This participation enables them to have direct access to a variety of information and to formulate social consciousness. It also enables them to have indirect and sometimes direct contact with officials, both governmental and private and official practices. Thus participation in social and cultural activities enlarges the horizon of their knowledge and transforms their ideas and outlook from traditional to modernity.

6.7.2.1 Taluk wise Impact on Social Participation

The extent of participation of respondents in various social and cultural organisation is compiled in table 6.24. The table reveals that the level of social participation is low among the borrowers than among the non-borrowers. In the borrowers group 65 per cent of farmers have high participation in social and cultural activities, 13 per cent have medium level of participation and 21 per cent have only low level of participation.
The corresponding percentage of participation of the non-borrowing group is 78, 11 and 11 per cent respectively. However, these differences between the two groups are statistically significant.

**TABLE 6.24**

**TALUK-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF SOCIAL PARTICIPATION**

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Actual %</td>
<td>Actual %</td>
<td>Actual %</td>
</tr>
<tr>
<td>Agasteeswaram</td>
<td>13</td>
<td>48</td>
<td>4</td>
</tr>
<tr>
<td>Kalkulam</td>
<td>19</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>Thovalai</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Villanvanco de</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>21</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Primary Data.

*Significant at 5 per cent level.

Taluk wise analysis of farmers in respect of their participation (Table 6.24) shows that there are significant differences between the two groups in the three taluks among the four taluks. In the Agasteeswaram taluk, 37 per cent of the borrowers have high level of social participation, 15 per cent medium and 48 per cent low levels. The corresponding percentage of the non-borrowing group is 89, 11 and zero per cents respectively. This difference is also statistically significant. In the Kalkulam taluk the borrowers have 59 per cent high level of...
participation, 13 per cent medium and 28 per cent low levels. The percentage of participation of non-borrowers are 75, 10 and 15 per cent respectively. However these differences are statistically significant. In the Thovalai taluk the level of social participation of borrowers and non-borrowers are equal. But the difference is not statistically significant. In the Vilavancode taluk 90 per cent of farmers have high level of social participation, 10 per cent medium and zero per cent low levels. The corresponding percentage of non-borrowing group are 69, 13 and 18 per cent respectively. This difference is statistically significant.

Overall the differences among borrowers and non-borrowers with relation to their level of social participation is statistically significant as the calculated chi-square value of 6.715 is higher than the tabular value of 5.99.

6.7.2.2 Land holding wise Impact on Social Participation

In table 6.25 the level of social participation of farmers is compiled on the basis of the size of land holdings. It is revealed that there is not much significant difference in social participation among borrowers and non-borrowers based on their land holding size.

Overall 43 per cent of borrowers have high level of social participation as compared to 44 per cent of non-borrowers. There is not
much difference and it is not statistically significant as the calculated value of 1.56 is less than the tabular chi-square value of 5.99.

**TABLE 6.25**

**LAND HOLDING-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF SOCIAL PARTICIPATION**

<table>
<thead>
<tr>
<th>Land Holdings</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Actual %</td>
<td>Actual %</td>
<td>Actual %</td>
</tr>
<tr>
<td>0 to 1</td>
<td>6</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>1 to 2</td>
<td>22</td>
<td>31</td>
<td>19</td>
</tr>
<tr>
<td>2 to 3</td>
<td>16</td>
<td>32</td>
<td>13</td>
</tr>
<tr>
<td>Above 3</td>
<td>3</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>31</td>
<td>39</td>
</tr>
</tbody>
</table>

*Source: Primary Data.*

*Significant at 5 % Level.*

Among small farmers, 42 per cent of borrowers have high level social participation, 26 per cent medium level and 32 per cent low level, but 31 per cent of the non-borrowers belonging to the small farmers category have high level of social participation and 38 per cent and 31 per cent have medium and low level of social participation. The difference is not statistically significant (chi-square value 1.531). The degree of social participation is more or less identical among marginal, medium and big farmers of the borrowing and non-borrowing group.
In general there is significant difference between borrowers and non-borrowers as regards their participation in cultural and social activities. However, there is no significant difference in their level of social participation based on their land holdings. So it can be concluded that social participatory level depends on the area of respondents rather than the land holdings of respondents.

6.7.3 Consumption

The third variable selected for analysing the living standards of borrowers is their consumption pattern. Table 2.26 presents the consumption level of farmers belonging to the borrower and non-borrower group. The table shows that there is difference between the two groups of farmers regarding this variable. In the borrower’s group 84 per cent of farmers have consumption high, 10 per cent have medium level and 6 per cent low consumption level. The corresponding percentage among the non-borrowing group are 74, 10 and 16 per cents respectively.
Taluk-wise analysis of the level of consumption (Table 6.26) shows that in the Agasteeswaram taluk the consumption level of borrowers in comparatively higher than that of non-borrowers. Of the total borrowers 74 per cent have high consumption level, 15 per cent medium and 11 per cent low level. The corresponding percentage of non-borrowers are 44, 11 and 44 per cents respectively. This difference in the consumption level of both the groups of farmers is statistically significant. In the Kalkulam taluk the consumption level of borrowers is higher than the consumption level of non-borrowers. Among the borrowers 84 per cent have high degree of consumption, 7 per cent medium and 9 per cent low degree. The corresponding percentage of non-borrowers are 81, 9 and 10 per cent respectively. The difference between two groups of farmers is statistically
significant. In the Thovalai taluk the consumption level of borrowers is less than the consumption level of non-borrowers. Among the borrowers 81 per cent have high degree of consumption and 19 per cent have medium degree. The corresponding percentage of non-borrowers are 94 and 6 respectively. The difference between the two groups of farmers is not statistically significant. In the Vilavancode taluk, the consumption level of borrowers is higher than that of non-borrowers. Of the total borrowers, 92 per cent have high consumption level, 8 per cent medium and 0 per cent low level. The corresponding percentage of non-borrowers are 74, 13 and 13 per cents respectively. The difference between the two groups of farmers is statistically significant (chi-square value 6.25).

6.7.3.2 Land holding wise Impact on Consumption

Land holding analysis of the consumption level of borrowers and non-borrowers (Table 6.27) shows that there is no difference, in the consumption level of marginal farmers (whose land holdings are less than 1 acre) of either groups. But in the level of consumption among big farmers who have land holdings of above 3 acres in the borrowing group, 60 per cent have low level of consumption, 0 per cent have medium level of consumption and 40 per cent have high level of consumption. The corresponding percentage of the levels of consumption of small farmers of the non-borrowing group are 0, 0, and 100 per cent respectively. This
shows that among big farmers non-borrowers, tend to have high level of consumption and this difference is statistically significant. The tabular chi-square value of 14.73 is higher than the tabular value of 5.99.

**TABLE 6.27**

**LAND HOLDING-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF CONSUMPTION**

<table>
<thead>
<tr>
<th>Land Holdings</th>
<th>Borrower</th>
<th></th>
<th></th>
<th>Non Borrower</th>
<th></th>
<th></th>
<th></th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Actual</td>
<td>%</td>
<td>Actual</td>
<td>%</td>
<td>Actual</td>
<td>%</td>
<td>Actual</td>
<td>%</td>
</tr>
<tr>
<td>0 to 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: Primary Data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Significant at 5 % Level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comprising the overall consumption level of borrowers tends to have a high percentage (i.e. 31 per cent) of medium level consumption as compared to non-borrowers who have a high level of consumption i.e. 66 per cent. This difference between borrower and non-borrowers is significant as the tabular value of 5.99 is lesser than the calculated value of 8.544.

The above analysis of the consumption level of farmers shows that there is considerable and significant difference between the
groups. The findings that the consumption level of farmers of the borrowers category have increased indicate that their income has increased due to the availability of credit. Looking from the angle of PACBs this means that the credit granted by them has been able to increase the income level vis-à-vis the consumption level of their borrowing members.

6.7.4 Entertainment

The level of entertainment is the fourth variable considered for measuring the standard of living of the borrowers of PACBs.

6.7.4.1 Taluk wise Impact on Entertainment

The level of entertainment between borrowers and non-borrowers reveals (Table 6.28) that the entertainment levels of borrowers is lower than that of the non-borrowers. Among the borrowers 79 per cent enjoy with the high level of entertainment, 9 per cent medium level and 12 per cent low level. The corresponding percentage of non-borrowers are 87, 10 and 3 per cents respectively. The difference, however, is statistically significant.
TABLE 6.28

TALUK-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF ENTERTAINMENT

<table>
<thead>
<tr>
<th>Taluk</th>
<th>Borrower</th>
<th>Non Borrower</th>
<th>Chi-Square Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Actual</td>
<td>%</td>
<td>Actual</td>
</tr>
<tr>
<td>agesheswaram</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>kalkulam</td>
<td>11</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>thovalai</td>
<td>7</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>villavancode</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>total</td>
<td>18</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: Primary Data.
*Significant at 5 per cent level.

Taluk-wise distribution of farmers according to their entertainment level (Table 6.28) shows that farmers belonging to the two groups have not shown much difference in their level of entertainment in Agasteswaram taluk. But significant difference is seen among the farmers of the Kalkulam taluk where borrowers have higher level of entertainment is found in 75 per cent of the borrowers have higher level of entertainment, medium level in 9 per cent and low level in 16 per cent. The corresponding level of entertainment of non-borrowers is 85, 7 and 7 per cents respectively. The difference is not statistically significant. In the Thovalai taluk the position of borrowers is better than that of non-borrowers with regard to this variable. However, the difference is statistically significant. In the Vilavancode taluk the position of borrowers
is better than that of non-borrowers with regard to this variable. However, the difference is not statistically significant.

6.7.4.2 Land holding wise Impact on Entertainment

Land holding wise distribution of farmers in relation to their level of entertainment (Table 6.29) reveals that there is no difference between the experiment group and control group. Cropping the level of marginal farmers of the five borrowing group with that of the non-borrowing group it is seen that the level of entertainment of the borrowing group is similar to that of the non-borrowing group. Also there exists some difference on the level of entertainment, the difference is not statistically significant.

**TABLE 6.29**

| LAND HOLDING-WISE DISTRIBUTION OF FARMERS ACCORDING TO THE LEVEL OF ENTERTAINMENT |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Land Holdings                  | Borrower                        | Non Borrower                    | Chi-Square Value                |                                |                                |                                |
|                                | Low    | Medium | High  | Low    | Medium | High  |                                |                                |                                |
|                                | Actual | Actual | Actual | Actual | Actual | Actual |                                |                                |                                |
| 0 to 1                         | 4      | 21     | 4     | 21     | 4      | 21     | 11     | 58     | 4      | 31     | 2      | 15     | 7      | 54     | 0.446  |
| 1 to 2                         | 15     | 21     | 17    | 24     | 39     | 55     | 6      | 10     | 17     | 29     | 36     | 61     | 2.89*  |
| 2 to 3                         | 11     | 22     | 7     | 14     | 32     | 64     | 14     | 23     | 3      | 5      | 44     | 72     | 2.79*  |
| Above 3                        | 1      | 10     | 3     | 30     | 6      | 60     | 0      | 0      | 4      | 24     | 13     | 76     | 2.47*  |
| Total                          | 31     | 21     | 31    | 21     | 88     | 59     | 24     | 16     | 26     | 17     | 100    | 67     | 2.695  |

Source: Primary Data.
*Significant at 5 per cent level.
The level of entertainment among small farmers of the borrowing group is higher than that of small farmers of the non-borrowing group. The difference is not statistically significant. When the level of entertainment of the medium farmers of the borrowing and non-borrowing group is compared, it is seen that there is no significant difference between two groups. The level of entertainment of big farmers of the borrowing group is less than the big farmers of the non-borrowing group. Among borrowers, 59 per cent have high level of entertainment, 21 per cent have medium level of entertainment and 21 per cent have low level. But among non-borrowers 67 per cent have high level of entertainment, 17 per cent medium and 16 per cent low. The difference between the two groups is statistically not significant as the calculated chi-square value (2.095) is less than the table value.

The above analysis on the level of entertainment of farmers leads to the conclusion that there is significant difference in the level of entertainment of the borrowing and non-borrowing group as regards to taluk. But with regards to their land holdings there seems to be no difference.

The absence of any serious change on the part of the borrowers shows that indulgence in entertainment depends on the region more than their land holdings.
6.8. Relationship between Credit and Agricultural Income and Employment

An attempt is made in this section to find out whether there is any relation between credit and other variables, particularly credit and income and credit and employment, because income and employment are central to other variables.

It is therefore worthwhile in examining the nature and extent of the relation between agricultural credit and agricultural income and between agricultural credit and employment.

6.8.1 Taluk-wise Relationship between Agricultural Credit and Income and Employment

Table 6.30 represents the co-efficient of correlation of average loan and agricultural income and days of employment. Taluk wise analysis shows that positive correlation existing between credit and agricultural income. However there is negative correlation between agricultural credit and employment.
TABLE 6.30
CO-EFFICIENT OF CORRELATION OF AVERAGE LOAN AND AGRICULTURAL INCOME AND AVERAGE LOAN AND EMPLOYMENT (TALUK-WISE)

<table>
<thead>
<tr>
<th>Name of Taluk</th>
<th>Correlation Coefficient</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture Income</td>
<td>Employment</td>
<td></td>
</tr>
<tr>
<td>Agastheswaram</td>
<td>0.795</td>
<td></td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>Kalkulam</td>
<td>0.714</td>
<td></td>
<td>-0.103</td>
<td></td>
</tr>
<tr>
<td>Thovalai</td>
<td>0.670</td>
<td></td>
<td>-0.373</td>
<td></td>
</tr>
<tr>
<td>Villanvancode</td>
<td>0.746</td>
<td></td>
<td>-0.051</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.717</strong></td>
<td></td>
<td><strong>-0.052</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data.

Taluk-wise distribution shows that in all four taluks selected for intensive study positive correlation exists between credit and income. High positive correlation is seen in Agasteeswaram taluk and Vilavancode taluk. It is higher in the Agasteeswaram taluk than in the Vilavancode taluk. In the Agasteeswaram taluk the calculated correlation value between credit and income is 0.795.

The correlation is quite moderate in all the taluks which shows that there is a relationship between credit and agricultural income. But the same cannot be true with regard to the relationship between credit and employment as three out of the four taluks Kalkulam, Thovalai and Vilavancode show negative correlation. This means that as credit increases employment may not increase. It should be noted here that the negative correlation is not very high but it is on the lower side.
6.8.2 Society wise Relationship between Agricultural Credit and Income and Employment

Table 6.31 reveals that positive correlation exists between credit and income of the borrowers in all the selected PACBs.

**TABLE 6.31**

CO-EFFICIENT OF CORRELATION OF AVERAGE LOAN AND AGRICULTURAL INCOME AND AVERAGE LOAN AND EMPLOYMENT (SOCIETY-WISE)

<table>
<thead>
<tr>
<th>Name of PACB</th>
<th>Correlation Coefficient</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agriculture Income</td>
<td>Employment</td>
</tr>
<tr>
<td>Mylady</td>
<td>0.807</td>
<td>-0.223</td>
</tr>
<tr>
<td>Kottaram</td>
<td>0.732</td>
<td>0.513</td>
</tr>
<tr>
<td>Maravankudieripu</td>
<td>0.792</td>
<td>0.239</td>
</tr>
<tr>
<td>Parakkai</td>
<td>0.976</td>
<td>0.593</td>
</tr>
<tr>
<td>Putheri</td>
<td>0.696</td>
<td>-0.376</td>
</tr>
<tr>
<td>Brammapuram</td>
<td>0.486</td>
<td>0.365</td>
</tr>
<tr>
<td>Madathattuvilai</td>
<td>0.907</td>
<td>0.084</td>
</tr>
<tr>
<td>Neyyoor</td>
<td>0.960</td>
<td>0.181</td>
</tr>
<tr>
<td>Pallapallam</td>
<td>0.953</td>
<td>0.425</td>
</tr>
<tr>
<td>Paraicode</td>
<td>0.724</td>
<td>0.059</td>
</tr>
<tr>
<td>Muttaicadu</td>
<td>0.687</td>
<td>-0.492</td>
</tr>
<tr>
<td>Andoor</td>
<td>0.900</td>
<td>0.136</td>
</tr>
<tr>
<td>Kannanoor</td>
<td>0.718</td>
<td>-0.200</td>
</tr>
<tr>
<td>Manakavilai</td>
<td>0.801</td>
<td>-0.177</td>
</tr>
<tr>
<td>Azahiapandiyapuram</td>
<td>0.482</td>
<td>-0.433</td>
</tr>
<tr>
<td>Thittuvilai</td>
<td>0.902</td>
<td>-0.275</td>
</tr>
<tr>
<td>Chankai</td>
<td>0.934</td>
<td>-0.662</td>
</tr>
<tr>
<td>Nattallam</td>
<td>0.696</td>
<td>-0.751</td>
</tr>
<tr>
<td>Unnamalaikadai</td>
<td>0.916</td>
<td>0.330</td>
</tr>
<tr>
<td>Pacode</td>
<td>0.864</td>
<td>0.179</td>
</tr>
<tr>
<td>Velavancode</td>
<td>0.926</td>
<td>0.491</td>
</tr>
<tr>
<td>Irenepuram</td>
<td>0.694</td>
<td>0.078</td>
</tr>
<tr>
<td>Kunnathoor</td>
<td>0.689</td>
<td>0.208</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.717</strong></td>
<td><strong>-0.0529</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data.
* Significant at 5 per cent level.
In the Agasteeswaram taluk high positive correlation is seen among the borrowers of the Mylaudy PACB and low positive correlation is found among the Kottaram PACB. Among the borrowers of the three PACBs of the Rajakkamangalam taluk high positive correlation exists in Parakai PACB, and other two PACBs the correlation is statistically low. Very low positive correlation of Maravankudieruppu PACB and Putheri PACB. In the Kurunthencode taluk high positive correlation is seen among the borrowers of Neyyoor PACB and Pallappallam PACB. Low positive correlation is found in the Madathattuvilai PACB and Brammapuram PACB. Among the borrowers of the two PACBs of Thuckalay taluk low positive correlation is found in Paraicode PACB and Muttaicadu PACB. In the Tiruvattar taluk positive correlation is seen among the borrowers of Kannanoor PACB and very low positive correlation found among the borrowers of Manakavilai PACB. The significant correlation exists between credit and agricultural income of the borrowers of Thittuvilai PACB of the Thovalai taluk. In the Killioor taluk, high positive correlation is seen among the borrowers of Chankai PACB and Unnamalaikadai PACB and very low positive correlation is found in the Nattalam PACB. In the Melpuram PACB high positive correlation is seen among the borrowers of the Vilavancode PACB and low positive correlation is found among the borrowers of Pacode PACB.
PACB-wise distribution of correlation between credit and days of employment reveals that significant correlation exists between credit and employment among the borrowers of the two PACB from Agasteeswaram taluk. Of the borrowers of the three PACBs of the Rajakkamangalam taluk, low positive correlation between credit and employment can be seen among the borrowers of Maravankudieruppu PACB and Parakkai PACB, Putheri PACB negative correlation between credit and employment. In the case of the borrowers of the other four PACBs of the Kurunthencode taluk positive correlation is identified. The correlation between credit and days of employment reveals that Paraicode PACB identified positive correlation, another PACB Muttaicadu PACB is identified negative correlation of the Thuckalay taluk. In the case of the borrowers of the two PACBs of Tiruvattar taluk, negative correlation is identified. Negative correlation between credit and employment can be seen among the borrowers of two PACBs in Thovalai taluk. In the case of the borrowers of the two PACBs of Tiruvattar taluk, negative correlation is identified. Negative correlation between credit and employment can be seen among the borrowers of two PACBs in Thovalai taluk. In the case of the borrowers of the two PACBs of Killioor taluk, negative correlation is identified. Of the borrowers of the two PACBs of the Melpuram taluk, low positive correlation between credit and employment can be seen among the borrowers of Pacode PACB and Vilavancode PACB. In the case of the
borrowers of two PACBs of Munchirai taluk, positive correlation between credit and employment can be seen among the borrowers of Ireneputam PACB and Kunnathoor PACB.

6.8.3 Land holding wise Relationship between Agricultural Credit and Income and Employment

The land holding wise distribution of co-efficient of correlation between credit and agricultural income is presented in table 6.32 which shows that there is positive correlation between agricultural credit and agricultural income (0.717). However, there exists negative correlation between agricultural credit and employment.

<table>
<thead>
<tr>
<th>Land Holding in Acres</th>
<th>Correlation Coefficient</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agriculture Income</td>
<td>Employment</td>
</tr>
<tr>
<td>Upto 1 Acre</td>
<td></td>
<td>0.179</td>
<td>-0.630</td>
</tr>
<tr>
<td>1 to 2 Acre</td>
<td></td>
<td>0.547</td>
<td>-0.135</td>
</tr>
<tr>
<td>2 to 3 Acre</td>
<td></td>
<td>0.440</td>
<td>-0.093</td>
</tr>
<tr>
<td>Above 3</td>
<td></td>
<td>0.714</td>
<td>0.529</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0.717</td>
<td>-0.0529</td>
</tr>
</tbody>
</table>

Source: Primary Data.

The land holding wise distribution of co-efficient of correlation between credit and agricultural income is presented in table
6.32. It is seen that small farmers whose land holdings are less than one acre have negative relationship (0.630) between employment and credit and a low positive correlation (0.179) between agricultural credit and employment.

It is very evident that large farmers who have land holdings more than three acres land show positive relationship between credit and income and also between credit and employment.

6.9 Conclusion

From the above analysis it can be pointed out that agricultural credit by PACBs has not made any significant difference in the agricultural production, income, employment, savings and standard of living of the farmers. Hence it is highly essential to think off viable alternatives to overcome these problems.