CHAPTER- IV
EMPLOYMENT, EARNINGS AND LABOUR
PRODUCTIVITY

4.1 INTRODUCTION
The people are the most valuable resource of a nation. The operation of an economy depends, to a great extent, on the employment of people, i.e. on the purchase, sale and performance of labour services. It is the work of labour which builds our towns, cities and factories, which makes the things we buy and which supplies us with services of all types. In fact labour is the source of all wealth and backbone of the nation.

Employment is the most national and the best way to achieve the objectives of economic growth, poverty eradication, social justice, social stability and peace. To have gainful and creative work is the basic imperative for man. Views such as “The right to work needs to be a constitutionally guaranteed right” are thus worthy of serious consideration.

4.2 PRODUCTION AND PRODUCTIVITY
Production signifies volume or quantum of output. Beri defines it as volume or quantum of output free from any price fluctuations of inputs. It represents results or manufacturing activity at all stages of transformation or processes of manufacturing. The results of production do not get reflected entirely as finished products components and work-in progress also constitute production. Production is the process in which goods or services or components are produced after a value addition. Production is usually in tangible forms with a positive economic value.

Productivity is different form production. The conventional concept visualises productivity as the ratio of the production of a commodity and its inputs. It is interpreted as the production per unit of input resources expended to achieve the production. In general it is
perceived as the ratio of the outputs and the inputs. Output is commonly understood as the goods produced (or sold) or value added. The inputs traditionally considered are the labour, the materials, capital employed, energy consumed etc.

Work study has been rightly described as ‘the technique above all others, which reaps direct and immediate benefits’. This is because one of its chief objectives is to make better use of existing resources in plant and labour. Where it is employed effectively the results are lowers costs, greater, output, easier work, less wage and higher earnings’. That said, it is true that work study, like other productivity techniques, is far from achieving its full potential as a means of setting right the many short comings which adversely affect production in this country.

Productivity as an index of a systems (or sub-systems) performance indicates the extent of actual accomplishment of performance objectives in relation to the attainable level in a given external environment.

There is a widespread misconception that productivity concerns only the output as obtained from labour. Consequently, any discussion on productivity veers round to how to obtain higher output from the labour. The concept of disguised unemployment was recognised by John Robinson in the sense of zero marginal productivity even in 1936. Talking about the concept of disguised unemployment in the developing countries, Ragnor Nurkse pointed out that “these countries suffer from large scale disguised unemployment in the sense that even with unchanged techniques of agriculture a large part of population engaged in agriculture could be removed without reducing agricultural output”. Nurkse argues that the surplus labour could be taken off the land and set to work on capital formation projects such as irrigation, drainage, roads, railways, houses, factories, training schemes and so on. These schemes
could be financed through voluntary (abstinence from consumption) and compulsory savings (taxation).

Disguised unemployment has disguised potential savings which become a sort of capital formation. Thus, disguised saving becomes effective savings and unproductive labour becomes productive labour when it is used for capital formation leading to economic development.

In this context, rural development was considered by the Government of India as the only solution to solve the twin problems of poverty and unemployment in rural areas. At the very commencement of planning in India rural development was given due place in the development plans. Eradication of poverty and unemployment through rural development has been one of the main goals of planning in India.

4.3 LABOUR IN HANDMADE PAPER INDUSTRIES

Normally to carry out handmade paper production process in the desirable manner the labourers are to be trained before actual deployment in commercial production units. For organizing training, centers are identified by the KVIC, mostly on region basis operating good production units are identified. Grant assistance is made available to these production centers by the KVIC so as to compensate their production losses on account of the training. The artisans too are paid stipend @ Rs.525 per month in ordinary localities and in A, A1 class cities and other expensive localities the stipend is extended by the KVIC to @ Rs.650 per month per trainee. The artisans’ skill is improved. Production losses are curtailed to a maximum extent. Desired results such as good quality of paper and board production as well as productivity are increased.
4.4 ANALYSIS OF EMPLOYMENT AND EARNING

4.4.1 Handmade Paper Unit, Pidagam

Table 4.1 presents the employment generated by the handmade paper unit, Pidagam for a period of ten years from 1991-92 to 2000-01.

The unit has employed workers and staff ranging from 53 to 29 with steady decline in the span of ten years. By referring to the values of production, the unit has employed 53 workers in 1991-92 for a production of Rs.6.07 lakhs and in 1999-2000, it has employed 34 workers for a production of Rs.27.16 lakhs. It could be observed that labour productivity has shown very high variations indicating the inconsistencies in their operational standards. Labour productivity values ranged between Rs.0.030 lakh and Rs.0.150 lakh with an average of Rs.0.16 lakh (per annum).

Thus, during 1991-92 to 1998-99, more labourers were used and under utilization of manpower was observed. Only during 1999-2000 and 2000-2001, the unit managed effectively the labour force with a peak performance in labour productivity. The unit has to maintain the existing level of labour productivity in the years to come for its survival.

In respect of per capita earnings, the unit has shown high variances ranging from Rs.0.037 to Rs.0.236. Higher per capita earnings could be noticed in 1998-99 and 2000-2001. In the remaining years the annual earnings were less than Rs.0.10 lakh. It is worth observing that whenever the per capita earnings were low, the values of production were also found to be low. Thus, low per capita earnings might be one of the reasons for low production due to poor morale and lack of motivation. Therefore, it is observed that higher values of production will have influence in improving the per capita earnings. Hence, the unit must enlarge the value of production for ensuring higher per capita earnings.
As per column (9), per capita investment in this unit ranged from Rs.0.068 lakh to Rs.0.727 lakh with an average of Rs.0.24 lakh. As there were very high variations in the value of capital employed, the per capita investments also showed very high fluctuations. Khadi and Village Industries Commission, Mumbai has fixed the per capita investment at Rs.0.50 lakh as benchmark. Pidagam Handmade Paper Unit has recorded low per capita investments from 1991-92 to 1999-2000 for 9 years. So the unit has to reduce the labourers employed or it has to raise the capital to fully utilize the available labourers and maximize of the economic activity. Hence, it can still reduce the labour component for the given fixed capital base.

4.4.2 Handmade Paper, Ponnavarayankottai

Table 4.2 presents the employment particulars of the handmade paper unit at, Ponnavarayankottai for a period of ten years. The unit had recorded very low employment profile ranging from 15 workers in 1991-92 to 7 workers in 2000-01, generating 83 man years in the 10 year period. After 1992-93, the unit has stabilized the level of employment to 7 workers for about 8 years. In respect of labour productivity, the values ranged between Rs.0.06 lakh and Rs.0.46 lakh with fluctuations. This speaks about the inconsistencies in the employment standards coupled with low production values recorded by the unit. Only after 1997-98, the unit has shown improvement in the labour productivity exceeding Rs.0.30 lakh. It is worth pointing out that in a few years the per capita earnings were lower than the labour productivity. For instance, during 1994-95, 1998-99 and 1999-2000 the per capita earnings exceeded the labour productivity. That is, the wages paid were in excess of the value of production contributed by each worker. This is an instance of underutilization of labour affecting the margins of the unit. On an average, the unit has scored labour productivity values of Rs.0.234 lakh.
against a per capita earning of Rs.0.196 lakh. The unit has been affected by high wages with low outputs. Thorough revision of production values and enhancing the productivity of the labour are the immediate strategies to the adopted by the unit.

As per column (8) of Table 4.2, the per capita earnings have shown very high variations suggesting rationalization and streamlining of operations. Per capita earnings were found to be satisfactory only during 1998-99 and 1999-2000. In the remaining years, it was less than Rs. 10,000 indicating the low earnings generated by the unit. Such poor per capita earnings will affect the morale of the employees and productivity will be reduced.

As per column (9) of Table 4.2, the per capita investment values ranged from Rs.0.085 lakh to Rs.0.40 lakh, which were well below the benchmark of Rs.0.50 lakh per employee as fixed by KVIC, Mumbai. The unit has to either reduce the employment component or to increase the capital base substantially to ensure reasonable per capita investment.

Thus, the unit has shown very low labour productivity and low per capita investment. The unit needs improvement in labour productivity by enhancing the value of production by identifying right choice of products based on market demands and providing training to the workers on better methods of doing the work. Further the capital base has also to be enhanced to the benchmark level of Rs.0.50 lakh per worker to ensure optimum labour utilization.

4.4.3 Handmade Paper Unit, Senbagapudur

The employment particulars, labour productivity, per capita earnings and per capita investment values of the handmade paper unit at Senbagapudur are furnished in Table 4.3.

The unit has employed workers ranging from 16 to 49 during the study period. In 1991-92 the unit had 16 employees and in the subsequent
year the unit has employed about 49 workers with 300 per cent increase. Referring to the production values, the unit has made corresponding increase in the value of output in 1992-93. From 1994-95 onwards, the unit has stabilized the labour component at about 26 workers up to 2000-01.

In respect of labour productivity, this unit also witnessed fluctuations from Rs.0.073 lakh to Rs.0.339 lakh, with an average of Rs.0.156 lakh per annum. Labour productivity values were found to be higher during 1994-95 and 1995-96 at above Rs.0.300 lakh. During these years the unit recorded its peak performance in the value of production at about Rs.8.00 lakh. Subsequently the production values receded affecting the productivity of the workers. And in 1991-92 the per capita earnings was higher than the per capita productivity. In the remaining years the productivity values were higher than the earnings ensuring safer operations. The per capita earnings as per column (8) of Table 4.3 ranged from Rs.0.14 lakh to Rs.0.04 lakh with fluctuations. From 1996-97 onwards the fluctuations were under control at Rs.0.35 lakh. Low per capita earnings during 1996-97 to 2000-01 were attributed to low values of production and corresponding payments. The unit has to improve production levels to that of 1994-95 (Rs.8.81 lakhs) to improve per capita earnings and to keep the morale of the workers at satisfactory levels.

In respect of per capita investments, (column (9), Table 4.3) the unit has recorded values ranging from Rs.0.095 lakh to Rs.0.305 lakh in the span of 10 years. This unit has never achieved the benchmark level of per capita investment of Rs.0.50 lakh during the period often years. The unit could raise the capital base and thereby enhance production and productivity.

Thus, the handmade paper unit at Senbagapudur, has scope to improve labour productivity by enhancing production levels and it can
enlarge its capital base to improve production by having value added products in their range.

4.4.4 Handmade Paper Unit, Thiruchengodu

Table 4.4 presents the employment generated, labour productivity, per capita earnings and per capita investment of the handmade paper unit at Thiruchengodu for a period of ten years.

The unit has employed workers ranging from 8 to 15 with an average employment of 11.4 workers per annum. The labour productivity values ranged from Rs.0.132 lakh to Rs.0.82 lakh with an average of Rs.0.464 lakh. Labour productivity values showed lower readings during 1991-92 to 1996-97 and afterwards the unit recorded higher values ranging from Rs.0.64 lakh to Rs.0.82 lakh. The reason for such improvement in productivity was due to higher values of production at about Rs.9.00 lakhs continuously from 1998-99 to 2000-01 and stabilization of labour used for production purposes.

As per column (8) of Table 4.4, the per capita earnings ranged from Rs.0.03 lakh to Rs.0.133 lakh with an average of Rs.0.100 lakh per annum. Low per capita earnings of Rs.0.03 lakh was recorded when the value of production was at its lowest at Rs.2.12 lakh during 1993-94.

Whenever the value of production surged, it yielded higher per capita earnings. Hence, it is suggested that the unit should work for its fullest capacity to raise production levels and improve the per capita earnings as it has direct relationship with productions.

The per capita investment (column (9) of Table 4.4) of Thiruchengodu Handmade Paper Unit ranged from Rs.0.194 lakh to Rs.0.401 lakh, with an average of Rs.0.194 lakh to Rs.0.401 lakh. Though this unit is considered a model technological handmade paper unit among the units in Tamil Nadu, it could not record the benchmark level of Rs.0.50 lakh in any year. This indicates that the unit has scope to
modernize and upgrade the production facilities from the average per capita investment of Rs.0.324 lakh to Rs.0.50 lakh.

Hence, the unit has the scope to raise labour productivity and to upgrade the existing production facilities for effective utilization of labour employed in this unit.

4.4.5 Handmade Paper Unit, Veeraragavapuram

Table 4.5 presents the number of employees worked, labour productivity, per capita earnings and per capita investment of the handmade paper unit at Veeraragavapuram.

The unit has employed workers ranging from 23 workers in 1992-94 to 16 workers in 1998-2001 with an average of 19 workers per annum. The unit has gradually reduced the labour from 23 to 16 in the span of seven years.

The labour productivity values showed very high fluctuations ranging from Rs.0.15 lakh to Rs.0.875 lakh. These variations could be attributed to the dips and peaks in the values of production, particularly during 1998-99 and 2000-01 respectively. Though the unit has scope to improve labour productivity to the level of 1999-2000 and 2000-01, it achieved very low values during 1991-92 to 1998-99 affecting the profitability of the unit.

In respect of per capita earnings, the unit has recorded values ranging from Rs.0.042 lakh to Rs.0.178 lakh with intermediate fluctuations. The average per capita earnings was very low at Rs.0.08 lakh per annum indicting the low wages per worker.

Per capita earnings has been influenced by the value of production. It is evident when the unit recorded peak values of production during 1999-2000 and in 2000-01 it recorded higher per capita earnings at Rs.0.17 lakh. Hence the unit has to improve the value of production to enhance the per capita earnings.
In respect of per capita investment, (column 9) the values ranged from Rs.0.117 lakh to Rs.0.464 lakh with very high fluctuations. Perusal of balance sheet indicates that during 1995-96, erosion of capital took place due to huge loss experienced by the unit and subsequently, the per capita investment was reduced. From 1991-92 to 1994-95, the capital was in excess of the benchmark level of Rs.0.50 lakh per employee and ranged from Rs.1.27 lakhs to Rs.1.75 lakhs. Later on due to operational problems and continued losses, the capital fund shrank and the per capita investment also came down. Only in 2000-01, it has shown increase at Rs.0.33 lakh per annum.

Hence, the unit should enhance production to use the available workers effectively and generate sufficient income to improve per capita earnings. It should also enhance the capital base for improving the per capita investment at least to the benchmark level of Rs.0.50 lakh per worker.

4.5 INDEX OF VALUE OF PRODUCTION TO PER RUPEE OF WAGES PAID

Manpower utilization and wages paid to the labour have great influence on the business prospects of any organization. Wages paid will have impact on the cost of production affecting the margins. High labour costs will reduce the margins. The present study has five sample units which have used labour for the production of handmade paper. Each unit is having certain quantum of labour having different wage structures. Hence, measurement of labour utilization based on the number of workers engaged could not help in comparative analysis. Hence, the present work has proposed a mathematical tool to facilitate comparison among the units. The tool will be ‘Index of value of production to per rupee of wages paid’. Labour productivity index will be measured with the formula:
Labour productive index = \frac{\text{Gross value Added by manufacture}}{\text{Total No/of labours engaged}}

Per capita earnings could be measured with the formula

Per capital Earnings = \frac{\text{Total wages paid}}{\text{Total No/of labours engaged}}

If labour productivity index is divided by per capita earnings, we could measure the value of production generated by the unit per rupee of wages paid as below.

Thus index of productivity per rupee of wages paid

= \frac{\text{Labour productivity index}}{\text{per capita index}}

= \frac{\text{Gross value added by manufacturing/No of labours engaged}}{\text{Total wages paid/No of labours engaged}}

= \frac{\text{Gross value added by manufacturing engaged}}{\text{Total wages paid}}

This index unit measures the intensity of the labour utilization by any firm. For example, if a unit has paid one rupee as wages to produce goods worth Rs. five, then the index of productivity per rupee of wages paid will be $= \frac{5}{1}=5$.

4.5.1 Handmade Paper Unit, Pidagam

Table 4.1 provides the particulars of the index of value additions per rupee of wages paid for 10 years. The values ranged from 0.43 to 2.75 with an average of 1.66. The unit has performed very poor during 1994-95, 1997-98 and in 1999-2000. During the above period, the value additions per rupee of wages were less than one rupee, indicating gross
Fig - 11
Index of Productivity to wages, Pidagam H.M.P Unit

Rs. in lakhs

Per capita Earnings
Per capita investment
IVPW* per rupees

Year


119
under utilization of the labour and the inability of the unit to improve value addition through right choice of products. Low values of Gross Value Added Manufacturing in the above three years could be attributed to the low production values coupled with high cost of purchases and closing stock. The unit however managed fairly letter with an average index of 1.66. The unit must ensure steps to improve value addition through production of varieties and reducing the closing stocks.

4.5.2 Handmade Paper Unit, Ponnavarayankottai

Column No (10) of Table 4.2 provide the index of gross value added by manufacture per rupee of wages paid the index values ranged between 0.39 and 18.38 with an average of 6.11. The unit has recorded fluctuate values of Gross Value Added Manufacturing yielding high degree of variations in the index values. Very low values of 0.39 and 0.9 were recorded during 1999-2000 and 1998-99 respectively as the unit has paid arrears of the wages for the period of 1991-92 to 1997-98. Though the index values have been quite satisfactory as the unit has recorded very low wage component, the Gross Value Added Manufacturing values were not consistent. The unit must ensure stability L. the values of production and stock to yield stable Gross Value Added Manufacturing values.

4.5.3 Handmade Paper Unit, Senbagapudur

The index of productivity per rupee of wages paid for the handmade paper unit, Senbagapudur are furnished Table 4.3.

The index values ranged from 0.46 to 4.52 with very high, fluctuations. From 1991-92 onwards the productivity index showed upward trend and in 1993-94 it jumped to an index value of 3.39 from 0.72 due to improvement in Gross value added by manufacture and corresponding reduction in the wage component. The reduction in the Gross Value Added Manufacturing from 1997-98 to 2000-01 affected the index of productivity values which were less than 2.00. The unit could
<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Capital</th>
<th>GVAM</th>
<th>Number of Labours</th>
<th>Wages paid</th>
<th>Labour productivity (4/5)</th>
<th>Per capita Earnings (6/5)</th>
<th>Per capita investment (3/5)</th>
<th>IVPW * per Rupees (4/6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1991-92</td>
<td>1.27</td>
<td>1.03</td>
<td>15</td>
<td>0.28</td>
<td>0.07</td>
<td>0.019</td>
<td>0.085</td>
<td>3.68</td>
</tr>
<tr>
<td>2.</td>
<td>1992-93</td>
<td>1.25</td>
<td>1.16</td>
<td>12</td>
<td>0.42</td>
<td>0.10</td>
<td>0.035</td>
<td>0.104</td>
<td>2.76</td>
</tr>
<tr>
<td>3.</td>
<td>1993-94</td>
<td>1.62</td>
<td>0.71</td>
<td>7</td>
<td>0.20</td>
<td>0.10</td>
<td>0.028</td>
<td>0.231</td>
<td>3.55</td>
</tr>
<tr>
<td>4.</td>
<td>1994-95</td>
<td>2.70</td>
<td>1.23</td>
<td>7</td>
<td>0.97</td>
<td>0.17</td>
<td>0.138</td>
<td>0.386</td>
<td>1.27</td>
</tr>
<tr>
<td>5.</td>
<td>1995-96</td>
<td>1.55</td>
<td>2.2</td>
<td>7</td>
<td>0.28</td>
<td>0.31</td>
<td>0.04</td>
<td>0.221</td>
<td>7.85</td>
</tr>
<tr>
<td>6.</td>
<td>1996-97</td>
<td>1.13</td>
<td>2.43</td>
<td>7</td>
<td>0.21</td>
<td>0.35</td>
<td>0.03</td>
<td>0.161</td>
<td>11.57</td>
</tr>
<tr>
<td>7.</td>
<td>1997-98</td>
<td>1.53</td>
<td>6.25</td>
<td>7</td>
<td>0.34</td>
<td>0.89</td>
<td>0.048</td>
<td>0.218</td>
<td>18.38</td>
</tr>
<tr>
<td>8.</td>
<td>1998-99</td>
<td>1.74</td>
<td>3.6</td>
<td>7</td>
<td>4.00</td>
<td>0.51</td>
<td>0.571</td>
<td>0.248</td>
<td>0.9</td>
</tr>
<tr>
<td>9.</td>
<td>1999-2000</td>
<td>1.27</td>
<td>2.62</td>
<td>7</td>
<td>6.62</td>
<td>0.37</td>
<td>0.945</td>
<td>0.181</td>
<td>0.39</td>
</tr>
<tr>
<td>10.</td>
<td>2000-2001</td>
<td>2.81</td>
<td>7.97</td>
<td>7</td>
<td>0.74</td>
<td>1.14</td>
<td>0.106</td>
<td>0.401</td>
<td>10.77</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>1.69</td>
<td>2.92</td>
<td>8.3</td>
<td>1.40</td>
<td>0.40</td>
<td>0.196</td>
<td><strong>0.224</strong></td>
<td>6.11</td>
</tr>
</tbody>
</table>

* Index of value of production to wages per Rupee

**Sources:** Computed from the annual audited reports of Ponnavarayankottai H.M.P Unit by the researcher.

121
Fig - 12
Index of productivity to wages, Ponnavarayankottai H.M.P Unit

![Graph showing productivity to wages over years with labels for: Per capita Earnings, Per capita investment, IVPW * per rupees.](image)

Year

Rs. In rupees
0 2 4 6 8 10 12 14 16 18 20
<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Capital</th>
<th>GVAM</th>
<th>Number of Labours</th>
<th>Wages paid</th>
<th>Labour productivity 4/5</th>
<th>Per capita Earnings 6/5</th>
<th>Per capita investment 3/5</th>
<th>IVPW * per Rupees 4/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1991-92</td>
<td>4.71</td>
<td>1.04</td>
<td>16</td>
<td>2.25</td>
<td>0.07</td>
<td>0.14</td>
<td>0.294</td>
<td>0.46</td>
</tr>
<tr>
<td>2.</td>
<td>1992-93</td>
<td>4.65</td>
<td>1.52</td>
<td>49</td>
<td>2.10</td>
<td>0.03</td>
<td>0.04</td>
<td>0.095</td>
<td>0.72</td>
</tr>
<tr>
<td>3.</td>
<td>1993-94</td>
<td>4.76</td>
<td>3.02</td>
<td>30</td>
<td>0.89</td>
<td>0.10</td>
<td>0.02</td>
<td>0.159</td>
<td>3.39</td>
</tr>
<tr>
<td>4.</td>
<td>1994-95</td>
<td>5.99</td>
<td>6.87</td>
<td>26</td>
<td>1.8</td>
<td>0.26</td>
<td>0.07</td>
<td>0.230</td>
<td>3.82</td>
</tr>
<tr>
<td>5.</td>
<td>1995-96</td>
<td>6.74</td>
<td>5.65</td>
<td>26</td>
<td>1.25</td>
<td>0.22</td>
<td>0.05</td>
<td>0.259</td>
<td>4.52</td>
</tr>
<tr>
<td>6.</td>
<td>1996-97</td>
<td>7.11</td>
<td>3.01</td>
<td>26</td>
<td>0.88</td>
<td>0.11</td>
<td>0.033</td>
<td>0.273</td>
<td>3.42</td>
</tr>
<tr>
<td>7.</td>
<td>1997-98</td>
<td>7.44</td>
<td>1.7</td>
<td>26</td>
<td>0.98</td>
<td>0.06</td>
<td>0.037</td>
<td>0.286</td>
<td>1.73</td>
</tr>
<tr>
<td>8.</td>
<td>1998-99</td>
<td>7.54</td>
<td>1.3</td>
<td>26</td>
<td>0.95</td>
<td>0.05</td>
<td>0.036</td>
<td>0.290</td>
<td>1.36</td>
</tr>
<tr>
<td>9.</td>
<td>1999-2000</td>
<td>7.63</td>
<td>1.67</td>
<td>25</td>
<td>0.86</td>
<td>0.07</td>
<td>0.034</td>
<td>0.305</td>
<td>1.94</td>
</tr>
<tr>
<td>10.</td>
<td>2000-2001</td>
<td>7.92</td>
<td>1.33</td>
<td>25</td>
<td>0.81</td>
<td>0.05</td>
<td>0.032</td>
<td>0.317</td>
<td>1.64</td>
</tr>
<tr>
<td>Mean</td>
<td>6.45</td>
<td>2.71</td>
<td>27.5</td>
<td>1.27</td>
<td>0.102</td>
<td>0.049</td>
<td><strong>0.251</strong></td>
<td>2.30</td>
<td></td>
</tr>
</tbody>
</table>

* Index of value of production to wages per Rupee

**Sources:** Computed from the annual audited reports of Senbahapudur H.M.P Unit by the researcher.
Fig - 13
Index of Productivity to Wages, Senbahapudur H.M.P Unit

- Per Capita Earnings
- Per capita Investment
- VSV * per rupees
not improve Gross Value Added Manufacturing after 1997-98 due to the following factors.

1. Reduction in the value of output;
2. Escalating input costs; and
3. Under utilization of the available production facilities.

Unless these problems are addressed immediately, the unit will suffer in respect of viability of operations and future prospects. Therefore, stabilization of operations, has to be ensured through productions planning labour utilization and producing quality goods.

4.5.4 Handmade Paper Unit, Thiruchengodu

The index productivity per rupee of wages paid in respect of the handmade paper unit, Thiruchengodu are furnished in Table 4.4.

The Index of productivity values per rupee of wages paid ranged from 1.09 to 8.12 with wide fluctuation. The Gross value added by manufacture values were well within 3.00 from 1991-92 to 1996-97. During these periods, the unit engaged varying levels of labour and could not enhance labour productivity values which were around 0.30. From 1997-98 onwards, the unit enhanced the Gross Value Added Manufacturing values continuously from 4.05 to 6.69 which were possible due to controlled of raw material costs and higher values of production with better value addition. The unit could stabilize labour employed around 12 persons, and labour productivity values have also improved. The unit has scope to improve its index of productivity per rupee of wages paid through rationalization of labour costs. However, the unit has shown revival trend with increasing index values and generating scope for the operations.

4.5.5 Handmade Paper Unit, Veeraragavapuram

The Index of productivity values per rupee of wages paid have been furnished in Table 4.5. The unit has recorded fluctuating Gross Value Added Manufacturing values ranging from 1.26 in 1996-97 of 8.87
Table 4.4

Index of productivity to wages, Tiruchengodu

<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Capital</th>
<th>GVAM</th>
<th>Number of Labours</th>
<th>Wages paid</th>
<th>Labour productivity 4/5</th>
<th>Earnings 6/5</th>
<th>Per capita investment 3/5</th>
<th>IVPW * per Rupees 4/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1991-92</td>
<td>2.90</td>
<td>1.35</td>
<td>15</td>
<td>1.23</td>
<td>0.09</td>
<td>0.082</td>
<td>0.194</td>
<td>1.09</td>
</tr>
<tr>
<td>2</td>
<td>1992-93</td>
<td>2.91</td>
<td>2.64</td>
<td>13</td>
<td>0.90</td>
<td>0.20</td>
<td>0.069</td>
<td>0.224</td>
<td>2.93</td>
</tr>
<tr>
<td>3</td>
<td>1993-94</td>
<td>2.92</td>
<td>1.95</td>
<td>8</td>
<td>0.24</td>
<td>0.24</td>
<td>0.03</td>
<td>0.365</td>
<td>8.12</td>
</tr>
<tr>
<td>4</td>
<td>1994-95</td>
<td>2.99</td>
<td>2.32</td>
<td>9</td>
<td>1.10</td>
<td>0.26</td>
<td>0.12</td>
<td>0.333</td>
<td>2.10</td>
</tr>
<tr>
<td>5</td>
<td>1995-96</td>
<td>4.01</td>
<td>2.98</td>
<td>10</td>
<td>0.94</td>
<td>0.30</td>
<td>0.09</td>
<td>0.401</td>
<td>3.17</td>
</tr>
<tr>
<td>6</td>
<td>1996-97</td>
<td>4.04</td>
<td>2.71</td>
<td>11</td>
<td>1.40</td>
<td>0.25</td>
<td>0.127</td>
<td>0.367</td>
<td>1.93</td>
</tr>
<tr>
<td>7</td>
<td>1997-98</td>
<td>4.10</td>
<td>4.05</td>
<td>12</td>
<td>1.60</td>
<td>0.34</td>
<td>0.133</td>
<td>0.342</td>
<td>2.53</td>
</tr>
<tr>
<td>8</td>
<td>1998-99</td>
<td>4.15</td>
<td>5.62</td>
<td>12</td>
<td>1.54</td>
<td>0.67</td>
<td>0.128</td>
<td>0.346</td>
<td>3.64</td>
</tr>
<tr>
<td>9</td>
<td>1999-2000</td>
<td>4.05</td>
<td>5.87</td>
<td>12</td>
<td>1.45</td>
<td>0.49</td>
<td>0.121</td>
<td>0.337</td>
<td>4.05</td>
</tr>
<tr>
<td>10</td>
<td>2000-2001</td>
<td>4.03</td>
<td>6.69</td>
<td>12</td>
<td>1.27</td>
<td>0.55</td>
<td>0.06</td>
<td>0.336</td>
<td>5.27</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>3.61</td>
<td>3.62</td>
<td>11.4</td>
<td>1.167</td>
<td>0.34</td>
<td>0.100</td>
<td>0.324</td>
<td>3.23</td>
</tr>
</tbody>
</table>

* Index of value of production to wages per Rupee

Sources: Computed from the annual audited reports of Tiruchengodu H.M.P. Unit by the researcher.
Fig - 14
Index of Productivity to wages, Tiruchengodu H.M.P Unit
## Index of productivity to wages, Veeraragarapurum

(Rs. in lakhs)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Capital</th>
<th>GVAM</th>
<th>Number of Labours</th>
<th>Wages paid</th>
<th>Labour productivity 4/5 (7)</th>
<th>Per capita Earnings 6/5 (8)</th>
<th>Per capita investment 3/5 (9)</th>
<th>IVPW * per Rupees 4/6 (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1991-92</td>
<td>6.66</td>
<td>2.45</td>
<td>21</td>
<td>0.96</td>
<td>0.12</td>
<td>0.045</td>
<td>0.317</td>
<td>2.55</td>
</tr>
<tr>
<td>2.</td>
<td>1992-93</td>
<td>9.4</td>
<td>2.85</td>
<td>23</td>
<td>1.00</td>
<td>0.12</td>
<td>0.043</td>
<td>0.409</td>
<td>2.85</td>
</tr>
<tr>
<td>3.</td>
<td>1993-94</td>
<td>10.67</td>
<td>4.95</td>
<td>23</td>
<td>1.06</td>
<td>0.21</td>
<td>0.046</td>
<td>0.464</td>
<td>0.21</td>
</tr>
<tr>
<td>4.</td>
<td>1994-95</td>
<td>6.45</td>
<td>4.3</td>
<td>21</td>
<td>0.93</td>
<td>0.20</td>
<td>0.044</td>
<td>0.307</td>
<td>4.62</td>
</tr>
<tr>
<td>5.</td>
<td>1995-96</td>
<td>3.80</td>
<td>1.82</td>
<td>20</td>
<td>0.84</td>
<td>0.09</td>
<td>0.042</td>
<td>0.190</td>
<td>2.17</td>
</tr>
<tr>
<td>6.</td>
<td>1996-97</td>
<td>3.23</td>
<td>1.26</td>
<td>18</td>
<td>0.82</td>
<td>0.07</td>
<td>0.046</td>
<td>0.179</td>
<td>1.54</td>
</tr>
<tr>
<td>7.</td>
<td>1997-98</td>
<td>2.10</td>
<td>1.4</td>
<td>18</td>
<td>0.87</td>
<td>0.08</td>
<td>0.048</td>
<td>0.117</td>
<td>1.60</td>
</tr>
<tr>
<td>8.</td>
<td>1998-99</td>
<td>2.39</td>
<td>2.08</td>
<td>16</td>
<td>2.15</td>
<td>0.13</td>
<td>0.134</td>
<td>0.149</td>
<td>0.97</td>
</tr>
<tr>
<td>9.</td>
<td>1999-2000</td>
<td>2.93</td>
<td>4.66</td>
<td>16</td>
<td>2.72</td>
<td>0.29</td>
<td>0.17</td>
<td>0.183</td>
<td>1.71</td>
</tr>
<tr>
<td>10.</td>
<td>2000-2001</td>
<td>5.29</td>
<td>8.87</td>
<td>16</td>
<td>2.86</td>
<td>0.55</td>
<td>0.178</td>
<td>0.331</td>
<td>3.10</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>5.29</td>
<td>3.46</td>
<td>19.2</td>
<td>1.42</td>
<td>0.186</td>
<td>0.08</td>
<td>0.260</td>
<td>2.13</td>
</tr>
</tbody>
</table>

* Index of value of production to wages per Rupee

**Sources:** Computed from the annual audited reports of Veeraragarapuram H.M.P Unit by the researcher.
Fig - 15
Index of productivity to wages, Veeragaraparam H.M.P Unit

- Per capita Earnings
- Per capita investment
- IVPW per Rupees
in 2000-01. Correspondingly the labour productivity values have been fluctuating from 0.07 to 0.55. The per capita earnings have also been varying from 0.042 to 0.178 with an average of 0.08. Fluctuating values of labour productivity coupled with varying levels of per capita earnings resulted in fluctuating values in Index of productivity per rupee of wages paid. The values ranged from 0.21 in 1993-94 to 3.10 in 2000-01. The peak performance was recorded in 2000-01 due to sudden increase in the Gross Value Added Manufacturing value at 8.87. The unit can improve the index of productivity per rupee of wages paid through enhancing the Gross Value Added Manufacturing values. The strategy for this unit will be to streamline the production operations, controlling the input costs and enhancing the sales through productivity of value added products. The above measures can ensure its sustainability and viability.
Table 4.6
Index of labour productivity of wage to per Rupee average

<table>
<thead>
<tr>
<th>SI.No</th>
<th>Name of the unit</th>
<th>Index of labour productivity of wage to per Rupee average</th>
<th>Peak</th>
<th>Low</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pidagam</td>
<td>1.66</td>
<td>2.75</td>
<td>0.43</td>
<td>2.32</td>
</tr>
<tr>
<td>2.</td>
<td>Ponnavarayankottai</td>
<td>6.11</td>
<td>18.38</td>
<td>0.9</td>
<td>17.48</td>
</tr>
<tr>
<td>3.</td>
<td>Senbahapudhur</td>
<td>2.3</td>
<td>4.52</td>
<td>0.46</td>
<td>4.06</td>
</tr>
<tr>
<td>4.</td>
<td>Thiruchengodu</td>
<td>3.23</td>
<td>8.12</td>
<td>1.09</td>
<td>7.03</td>
</tr>
<tr>
<td>5.</td>
<td>V eeraraga vapurara</td>
<td>2.13</td>
<td>4.62</td>
<td>0.21</td>
<td>4.41</td>
</tr>
</tbody>
</table>

Source: Computed from the above units by the researcher
4.6 SUMMARY

Considering the performance of all the handmade paper units considered for the present work, the following inferences could be drawn.

Of the five units, the handmade paper unit at Ponnavarayankottai has scored better average of 6.11 as Index of productivity per rupee of wage paid and other units performed far below this handmade paper unit. At the same time, the unit recorded a peak index of 18.38 and a low index of 0.9. Despite the unit making efforts in controlling the wages, it could not stabilize the Gross Value Added Manufacturing and met with fluctuating trends. Hence the handmade paper unit at Ponnavarayankottai has to streamline the production and operations for achieving stable Gross Value Added Manufacturing to make better returns.

The handmade paper unit at Thiruchengodu showed the second best performance, recording an index value of 3.23. This unit has recorded higher Gross Value Added Manufacturing values but the wages component had shown higher values affecting the index of productivity per rupee of wages paid. The year wise values have shown stability except during 1993-94. The unit has to ensure stability in employment and rationalize the labour strength to an optimum level. The unit can further improve Gross Value Added Manufacturing through enlarging the share of value added products against low value items like plain boards and flap pads.

The handmade paper unit at Shenbagapudur has scored an Index of productivity next to the handmade paper unit at Thiruchengodu with an average of 2.3. The unit recorded a peak of 4.52 and a low of 0.46 in the span of ten years indicating high level of fluctuations. This indicates the lack of production planning, market forecasting and manpower planning etc., perusal of the labour productivity (Table 4.6) has shown that the unit had recorded varying levels of Gross Value Added Manufacturing and
from 1996-97 onwards the productivity index. Concurrently the unit has also reduced the wage payment during 1996-97 to 2000-01. Otherwise the productivity index per rupee of wage paid would have been still worse. The unit has to ensure higher value addition through appropriate diversified handmade paper products, improving the quality of the existing products and reducing the untrained labourers and keeping only the skilled labourers for better returns and for higher index values of productivity. The unit has already met with unviable level of activity during 1991-92 and 1992-93 with index values of 0.46 and 0.72 respectively per rupee of wages paid. In order to avoid such recurrences in future the remedial measures have to be ensured in time.

The handmade paper unit at Pidagam stood last in respect of the index of productivity per rupee of wages paid with an average of Rs. 1.66. It recorded a peak of 2.75 and a low of 0.43 in the span of ten years. The unit recorded comfortable Gross Value Added Manufacturing values and the number of labourers employed was found to be very high ranging from 29 persons to 53 persons. Hence, higher share of wage payment affected the index of productivity in this unit. From 1991-92 to 1997-98, the Gross Value Added Manufacturing values were quite moderate and the per capita earnings were also moderate. Only from 1998-99 onwards the unit has taken measures to improve Gross Value Added Manufacturing values and correspondingly reduced the number of labourers to 29. These measures have made the unit record better scores like 2.25 in 2000-01. If rationalization of work were addressed properly, the unit would improve the index values as it has recorded consistently better Gross Value Added Manufacturing values. Adequate work planning, job evaluation and ensuring appropriate work norms may help to generate better index values.
Four handmade paper units viz., those Ponnvarayankottai, Thiruchengodu, Veeraragavapuram and Senbagapudhur have to improve and stabilize their Gross Value Added Manufacturing values and the handmade unit at Pidagam has to rationalize the labour force for augmenting index of productivity per rupee of wages paid.

These suggested remedial measures require adequate supervision and monitoring by the Khadi and Village Industries Board and Khadi and Village Industries Commission for sustenance.

The hypothesis status that the per capita investment will be very low has been proved in respect of all the units, as they have recorded average per capita investment ranging from Rs.0.24 lakh to 0.26 lakh.

In respect of the per capita earnings also the hypothesis has been proved as it ranged from Rs.0.079 lakh to 0.190 lakh per employee in the units under review. Low wage earning capacity and low labour productivity has been attributed to lower level of technologies and under utilization of plant and machinery.
REFERENCES


