Chapter IV
AGRICULTURAL UNDEREMPLOYMENT IN UTTAR PRADESH

4.1 INTRODUCTION

The previous chapter has reviewed some of the national studies on agricultural underemployment in developing economies including India. Now it is equally necessary to view the whole problem of agricultural underemployment in Uttar Pradesh. Unemployment and underemployment are well known endemic features of our rural economy, self employment in State agriculture tends to be characterised by severe underemployment because of small size of holdings, heavy pressure of population on land, seasonal variations and lack of adequate alternative avenues of employment.

The first section deals with the economic profile of Uttar Pradesh and importance of agriculture in the State economy. Secondly, the problem of unemployment and the underemployment in the agriculture in Uttar Pradesh during Five Year Plans, and the lastly, investigations in few selected villages in different parts of the state.
SECTION I
ECONOMIC PROFILE OF THE STATE

The economy of a region depends to a considerable extent on its physical environments. Natural resources materially condition the progress or backwardness of the region. With such a large segment of population of India living within its boundaries, economic development of Uttar Pradesh assumes special significance. By the sheer weight of its naturally affect the average level of living of the country as a whole.

4.2 PHYSIOGRAPHY

Although Uttar Pradesh as a whole is a backward State, yet there are certain regions where backwardness is all the more conspicuous. Among these are the eastern districts, the Bundelkhand Divisions and the hill districts.¹

In Bundelkhand Division a large part is not fit for cultivation on account of its hilly terrain. The agricultural productivity of this region is lower than the state average on account of low fertility of the soil and lack of irrigational facilities. The region is also deficient in drinking water facilities.²

² M.D. Joshi, Seminar on "Backwardness of Uttar Pradesh", Thinker's Forum (under the auspices of Bharat Seva Sansthan, Lucknow), 16 March, 1972, p. 20.
In the hill region the problems of transportation and
communications, irrigation, drinking water and unemployment are
particularly acute. Floods are a regular feature in Uttar
Pradesh. Practically every year, vast areas are inundated.
This causes damage to crops and takes a heavy toll of cattle,
and human life. Every year about 10 lakh hectares land are
affected in low flood and 40 lakh hectares land during a year
of high flood. 3

So far as minerals are concerned, Uttar Pradesh is not
well off in this respect. Some mineral deposits like bauxite,
dolomite, iron ore, gypsum, limestone, coal and copper ore are
found in the Northern Himalayan districts and the districts of
Mirzapur, Jhansi and Banda.

The State of Uttar Pradesh stands fifth in respect of
forest area among all the States of the country. The area under
forests in Uttar Pradesh works out to 16.83 per cent of the
total geographical area in the State as compared to 22.98 per
cent in India and the per capita forest area in Uttar Pradesh
is only 0.06 hectare, as against 0.15 hectare in the country.
The State is, therefore, deficient particularly in forests. 4

The literacy rate in the State at the 1971 Census comes
to 21.64 per cent, the respective percentages of literacy among

3 Draft Fifth Five Year Plan, Uttar Pradesh, Vol. I, Planning
4 Ibid., p. 22.
males and females being 31.74 and 10.20. The low level of education in Uttar Pradesh is not merely and index of its backwardness but also an impediment in its growth. (The per capita expenditure on education in Uttar Pradesh was Rs. 6.36 in 1967-68 as against all India average of Rs. 10.37). On medical care and public health for 1967-68 per capita expenditure in Uttar Pradesh was Rs. 1.27 and 1.12 as against the corresponding all India average of Rs. 2.44 and 1.64 respectively. 5

4.3 GENERAL POPULATION

The population of Uttar Pradesh, according to the Census data of 1971, works out at 883 lakh of which 469 lakh are males and 414 lakh females. The number of females per thousand male is 883. The population of the State constitutes 16.1 per cent of India's population though it extends over only 9.1 per cent of the total area of the country. The population has registered a greater rate of growth (19.73 per cent) during the decade 1961-71 as compared to the previous decade of 1951-61, when the population of the State rose by 16.66 per cent. 6 It may be interesting to note that Uttar Pradesh has more population than most of the countries of the world.

Density of population in Uttar Pradesh is one of the highest in the world. (The State's population has higher rural composition

5 Fifth Finance Commission of India, 1969.
compared to all India. According to Census of 1971, 86 per cent of State's total population lived in villages, compared to about 75 per cent for the entire country). Within the State the eastern region has the highest density of population and has the lowest cultivable area per worker. The percentage of rural population is very high in this region, for instance it is 98.5 per cent in Basti district, 97.6 per cent in Deoria and 96.6 per cent in Ghazipur.  

4.4 LIVELIHOOD PATTERN

The whole State is characterized by high density of population completely dependent on agriculture, small and scattered agricultural holdings, low agricultural productivity, inadequate irrigation facilities, lack of nonagricultural labourers, recurrence of floods and drought and low level of literacy. According to the 1961 census, the male agricultural labourers in India were 31.48 million, formed 16.71 per cent of the total male population and total male agricultural workers inclusive of cultivators -- about 69 per cent of the total male population. Agricultural labourers formed 11.30 per cent of total workers in the State, and total cultivators including agricultural labourers formed 75.3 per cent which became 79.6 per cent in the 1971 Census. Thus 79.6 per cent of the working force of the State was engaged in agriculture as compared to 67 per cent for the country. However, the proportion of workers

7 See Appendix Tables AI and AII, for details.
among rural and urban population in the State formed 53.55 and 28.41 per cent as mentioned in the Appendix tables A.III and A.IV. In brief, as shown in Table 4.1, the distribution of workers under three categories of cultivators, agricultural labourers and other workers in total in Uttar Pradesh and India.

Uttar Pradesh, like the rest of the country, is predominantly an agricultural State and most of the persons are engaged in agricultural pursuits. There are 15,910,591 cultivators and 5,497,317 agricultural labourers in the State. The workers engaged in all other activities are only 70,08,963. It will be seen that the number of cultivators is about three per cent of agricultural labourers.

4.5 STATE AND PER CAPITA INCOME

A comparison of total and per capita income of Uttar Pradesh with the total and per capita income of India brings out the relative backwardness of Uttar Pradesh. The share of Uttar Pradesh in the total income of the country at current prices declined from 13.5 per cent in 1960-61 to 12.9 per cent in 1970-71 because of a relative faster rate of growth in the national income than that in the State income. While the per capita income of the country in 1960-61 at constant prices was Rs. 306 that of Uttar Pradesh was only Rs. 246. Further whereas by 1970-71 that all India estimate was Rs. 347 (an increase of Rs. 41), for Uttar Pradesh the figure estimate was Rs. 276
Table 4.1: Distribution of Workers by Main Livelihood Categories, viz., Cultivators, Agricultural Labourers and Other workers, in Uttar Pradesh: 1961 and 1971.

<table>
<thead>
<tr>
<th>Livelihood Class</th>
<th>UTTAR PRADESH</th>
<th></th>
<th></th>
<th>I N D</th>
<th>I A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Cultivators</td>
<td>18,428,376</td>
<td>63.88</td>
<td>15,910,591</td>
<td>55.99</td>
<td>99,528,313</td>
<td>52.78</td>
<td>78,706,876</td>
</tr>
<tr>
<td>Agricultural Labourers</td>
<td>3,261,178</td>
<td>11.30</td>
<td>5,497,317</td>
<td>19.35</td>
<td>31,519,411</td>
<td>16.71</td>
<td>47,304,808</td>
</tr>
<tr>
<td>Other Workers</td>
<td>7,160,587</td>
<td>24.82</td>
<td>7,008,963</td>
<td>24.66</td>
<td>57,523,818</td>
<td>30.51</td>
<td>57,593,641</td>
</tr>
</tbody>
</table>

(an increase of Rs. 30). In current prices the per capita income of the country in 1970-71 has been estimated to be Rs. 633, for Uttar Pradesh 523. The gap between per capita income of the state and of country in terms of constant prices of 1960-61, which was Rs. 60 in 1960-61, widened further to about Rs. 70 in 1970-71.8

The structural composition of the State's income over different sectors brings out the variations in percentage from year to year. The Table 4.2 below shows the percentage distribution of the State income by industrial origin at constant prices from 1960-61, 1968-69 and 1970-71.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agricultural and Allied Activities</td>
<td>60.9</td>
<td>57.5</td>
<td>56.8</td>
</tr>
<tr>
<td>2</td>
<td>Mining, quarrying, large and small scale manufacturing and construction</td>
<td>10.2</td>
<td>10.7</td>
<td>12.5</td>
</tr>
<tr>
<td>3</td>
<td>Commerce, transport and communications</td>
<td>12.3</td>
<td>13.8</td>
<td>13.6</td>
</tr>
<tr>
<td>4</td>
<td>Other services</td>
<td>16.6</td>
<td>18.0</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


8 See Appendix Tables A.V and A.VI for details.
As seems from the table the contribution of agriculture to the State income has fallen from 60.9 per cent in 1960-61 to 56.8 per cent in 1970-71 correspondingly the contribution of tertiary sector has gone up. This upward trend is exhibited by commerce, transport and communications and other services. This decline in the contribution of the agricultural sector indicates that there has been a faster increase in the non-agricultural income than that in agricultural income since 1960-61.

Per capita income from agriculture, industry and mining is another indication of backwardness which has been mentioned by the working group, "... that in 1964-65 at 1960-61 prices the per capita contribution by industry and mining in Uttar Pradesh was Rs. 11 as against all-India average of Rs. 33, and Rs. 81 in Maharashtra and Rs. 68 in West Bengal." 9

4.6 GROWTH RATE

The period for which the estimates of the State income of Uttar Pradesh are available covers the first four Five Year Plans and as such it would be worthwhile to compare the growth rate of different sectors (i.e., the State income at constant prices) and have an idea of the overall development of the State's economy during the Plans.

The per capita outlay in Uttar Pradesh has been consistently below the all States' outlay throughout this period.

This is one of the main reasons for the relatively low growth rate in income in the State. The Table 4.3 shows that while total income from 1960-61 to 1970-71 in Uttar Pradesh advanced at a rate of about 2.8 per cent, per capita income rose by 0.5 per cent at 1960-61 prices. In the country, on the other hand, the national income had been rising by about 3 to 4 per cent and per capita income had also advanced by 1.5 per cent during the same period. During the first Five Year Plan, the growth rate in Uttar Pradesh was 1.9 per cent as against all India rate of 3.4 per cent. During the Third Five Year Plan the corresponding figures were same as the Second Five Year Plan and during the Annual Plans of Uttar Pradesh, growth rate were 2.7 per cent as against all India rates of 4.0 per cent.

Table 4.3 : Rate of Growth in India and Uttar Pradesh: Different Periods.

<table>
<thead>
<tr>
<th>Period</th>
<th>Total income</th>
<th>Per capita income</th>
<th>Total income</th>
<th>Per capita income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>India</td>
<td>India</td>
<td>U.P.</td>
<td>U.P.</td>
</tr>
<tr>
<td>First Plan</td>
<td>3.4</td>
<td>1.6</td>
<td>1.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Second Plan</td>
<td>4.0</td>
<td>1.8</td>
<td>1.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Third Plan</td>
<td>2.5</td>
<td>0.3</td>
<td>2.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>Three Annual Plans</td>
<td>4.3</td>
<td>2.1</td>
<td>2.1</td>
<td>-0.2</td>
</tr>
<tr>
<td>1969-70 to 1970-71</td>
<td>5.4</td>
<td>3.0</td>
<td>5.5</td>
<td>3.0</td>
</tr>
<tr>
<td>1960-61 to 1970-71</td>
<td>3.6</td>
<td>1.3</td>
<td>2.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>

So far as per capita growth rates are concerned in the State, these were 0.5, 0.2, -0.1 and 0.3 during the First, Second, Third and three Annual Plans respectively, whereas the corresponding all India rates were 1.6, 1.8, 0.04 and 1.5 respectively. The true picture of the economic condition of the rural people in India during Plan period has been drawn by Shenoy.10

The rates of growth in various sectors of Uttar Pradesh and India had shown large variations during different periods. As explained in the appendix Table A.VII, the rate of growth in agriculture which was 1.1 per cent in the First Plan, 3.8 per cent in the Second Plan, 0.4 per cent in the Third Plan, fell to 2.1 per cent during the three year period of Annual Plan giving an overall rate of 1.7 per cent during the income year period ending 1969-70 in the Uttar Pradesh. Like agriculture, industrial sector showed varying trends. Large scale manufacturing sector was mostly responsible for these variations in the State.

4.7 AGRICULTURAL PRODUCTION

Uttar Pradesh is one of the major food-grains producer of the country. During 1968-69 to 1970-71 the average foodgrain

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10 An idea of the general deterioration in the condition of the rural poor in India during Plan period can be had by the following observations of Shenoy: "... during the First Plan per capita income averaged 27 per cent of the average urban income. This percentage came down to 24 in the Second Plan, to 20 in the Third Plan and only 18.5 during the fourth year period 1969-70". B.R. Shenoy, "Indian Economic Malaise, The Times of India, Oct.23,1973.
production in the State amounted to 17.8 million tonnes or 17.6 per cent of the country’s total foodgrains production. Among food crops, Uttar Pradesh ranks first in the production of wheat, barley, maize, gram and pulses. Among non-food crops, Uttar Pradesh leads among all the states in the production of sugar-cane, rapeseed and mustard, sesamum, linseed and potato.\(^{11}\)

In the year 1970-71 the total cropped area in the State was 22.2 million hectares, of this 19.5 million hectares or 88 per cent were under food crops and the remaining 12 per cent under non-food crops. This compared to the national pattern, the cropping pattern in Uttar Pradesh is based towards foodgrains. During the past decade ending 1970-71, the area under wheat and maize expanded rather sharply while the average increase in area under barley to that of wheat.

The State is net exporter in rice, bajra, gram and pulses. It also exports large quantities of sugar, gur, khandzari and oil seeds, particularly rapeseed and mustard and to a smaller extent ground-nut. But it imports large quantities of ground-nut oil. Though the State accounts for about one third of the country’s total wheat production, it imports substantial quantities.

During the period 1952-53 to 1964-65, the growth rate of

\(^{11}\) The production of total foodgrains were 19.59 million tonnes in 1970-71 as compared to 15.73 million tonnes in 1973-74. It means there was a substantial decrease in food production in 1973-74 as compared to 1970-71. See Appendix Tables A.VIII and A.IX for details.
Agricultural production in the state was 2.4 per cent per annum as compared to 3.8 per cent for the country. During the same period the growth rate of food grains production was comparatively small, while it was comparatively high in the case of non-food grains as given in the Table 4.4.

Table 4.4: Index Numbers of Agricultural Production in Uttar Pradesh: 1952-53 to 1970-71.

<table>
<thead>
<tr>
<th>Year</th>
<th>Food grains</th>
<th>Non-Food grains</th>
<th>All Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952-53</td>
<td>95.1</td>
<td>82.9</td>
<td>91.3</td>
</tr>
<tr>
<td>1956-57</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1960-61</td>
<td>113.5</td>
<td>111.9</td>
<td>113.0</td>
</tr>
<tr>
<td>1964-65</td>
<td>117.1</td>
<td>133.1</td>
<td>121.8</td>
</tr>
<tr>
<td>1968-69</td>
<td>127.9</td>
<td>105.9</td>
<td>121.0</td>
</tr>
<tr>
<td>1970-71</td>
<td>156.7</td>
<td>119.4</td>
<td>145.0</td>
</tr>
</tbody>
</table>

Annual Compound rate of growth between 1952-53 and 1964-65

<table>
<thead>
<tr>
<th>Year</th>
<th>Food grains</th>
<th>Non-Food grains</th>
<th>All Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952-53 to 1964-65</td>
<td>1.7 (3.7)</td>
<td>4.0 (4.5)</td>
<td>2.4 (3.8)</td>
</tr>
<tr>
<td>1964-65 &amp; 1970-71</td>
<td>5.0 (3.2)</td>
<td>-1.6 (0.4)</td>
<td>2.9 (2.3)</td>
</tr>
<tr>
<td>1952-53 &amp; 1970-71</td>
<td>2.8 (3.3)</td>
<td>2.1 (3.1)</td>
<td>2.6 (3.3)</td>
</tr>
</tbody>
</table>

Note: Figures in brackets indicate all-India growth rate.


Taking the long period, i.e., 1952-53 to 1970-71, the growth rate of agricultural production in Uttar Pradesh was lower (2.6 per cent) in comparison to the whole country (3.3...
per cent). However, a welcome trend during 1964-65 and 1970-71 in agricultural production in food-grains was highest at 5 per cent annum against the national average 3.2 per cent. This is mainly due to the fact that the wheat revolution in Punjab is spreading to Western districts of Uttar Pradesh. The total food production is expected to rise from 205 lakh tonnes in 1973-74 to 280 lakh tonnes in 1978-79. Among the States with below average growth rate, Uttar Pradesh is having lowest productivity, i.e., 0.9 per cent per annum in 1952-53 and 1964-65.

4.8 AGRICULTURAL HOLDINGS

The disguised unemployment or underemployment in the agricultural sector is due to the presence of small farms or holdings, which are not able to give full employment to the cultivator's family. It has been asserted in the Table 4.5, the 65 per cent of land holding of about 95 lakh, agricultural households, own holdings below 5 acres, covering nearly one third of the total crop growing area in Uttar Pradesh, 21.69 per cent of the holding within 5-10 acres range consisting of 27.67 per cent of the total area, 6.4 per cent holding are within the group 10-15 acres occupying 13.49 per cent of the total area and 5.9 per cent of holdings are within the

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12 Draft Fifth Five Year Plan, Uttar Pradesh, op.cit., p. 101.
13 For Statewise growth rates of food production and productivity see Appendix Tables AX and AXi, for details.
Table 4.5: Distribution of Land Holding in Uttar Pradesh:
1968-69

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Grade of Land holdings (in acres)</th>
<th>No. of holdings</th>
<th>Percentage of the total No. of holdings</th>
<th>Percentage of households</th>
<th>Area of holdings (in acres)</th>
<th>Percentage to total area under holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Below 1.00</td>
<td>11,23,060</td>
<td>11.80</td>
<td>39.84</td>
<td>11,25,558</td>
<td>2.63</td>
</tr>
<tr>
<td>2</td>
<td>1.00 but below 2.50</td>
<td>25,66,160</td>
<td>27.06</td>
<td>20.16</td>
<td>43,52,443</td>
<td>10.17</td>
</tr>
<tr>
<td>3</td>
<td>2.50 but below 5.00</td>
<td>25,35,625</td>
<td>26.74</td>
<td>19.24</td>
<td>87,00,606</td>
<td>20.33</td>
</tr>
<tr>
<td>4</td>
<td>5.00 but below 7.50</td>
<td>14,11,695</td>
<td>14.89</td>
<td>9.04</td>
<td>69,75,892</td>
<td>16.30</td>
</tr>
<tr>
<td>5</td>
<td>7.50 but below 10.00</td>
<td>6,52,665</td>
<td>6.8</td>
<td>4.57</td>
<td>49,51,599</td>
<td>11.57</td>
</tr>
<tr>
<td>6</td>
<td>10.00 but below 12.50</td>
<td>4,11,440</td>
<td>4.3</td>
<td>2.47</td>
<td>34,62,268</td>
<td>8.09</td>
</tr>
<tr>
<td>7</td>
<td>12.50 but below 15.00</td>
<td>2,08,220</td>
<td>2.1</td>
<td>1.34</td>
<td>23,11,032</td>
<td>5.40</td>
</tr>
<tr>
<td>8</td>
<td>15.00 but below 20.00</td>
<td>-</td>
<td>-</td>
<td>1.51</td>
<td>-</td>
<td>7.77</td>
</tr>
<tr>
<td>9</td>
<td>20.00 but below 25.00</td>
<td>4,10,880</td>
<td>4.3</td>
<td>0.81</td>
<td>66,03,560</td>
<td>5.33</td>
</tr>
<tr>
<td>10</td>
<td>25.00 but below 30.00</td>
<td>-</td>
<td>-</td>
<td>0.29</td>
<td>-</td>
<td>2.33</td>
</tr>
<tr>
<td>11</td>
<td>30.00 and above</td>
<td>1,60,975</td>
<td>1.6</td>
<td>0.73</td>
<td>43,13,926</td>
<td>10.08</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>94,80,720</td>
<td>100.00</td>
<td>100.00</td>
<td>427,96,884</td>
<td>100.00</td>
</tr>
</tbody>
</table>

group of 15 and above acres in the State. The phenomenon of declining size of land holdings due to increase in population.

4.9 LAND UTILIZATION, IRRIGATION AND YIELD OF PRINCIPAL CROPS

The alluvial soil with rich water resources provides excellent opportunities for development. It is therefore, not surprising that the percentage net area sown (as percentage of total reported area) is 56.6 per cent in Uttar Pradesh against 44.8 per cent in the country. The area sown to more than once (as percentage of total reported area) is 17 per cent in the State against 7 per cent in the country. Similarly percentage of net area irrigated (as per cent of net sown area) is 36.1 per cent as compared to 20.1 per cent of the country in 1968-69.14

As the table XII in the Appendix indicates, the reported sown area and the area under forest both significantly increased from 1950-51 to 1970-71, while the barren and uncultivable land, land put to non-agricultural uses, cultivable waste, permanent pastures etc. declined. Similarly the net area sown and the area sown more than once considerable increased during this period while the area under current fallow was reduced from 1076 thousands hectares to 838 thousands hectares. The percentage of double cropped area to net area sown increased from 23 to 33 during the two decades under review.

The proportion of double cropped area to net sown area in the eastern region abruptly increased from 30.4 per cent in 1966-69 to 34 per cent during 1970-71. Western region has the highest percentage of double cropped area to net area sown. As a result of these changes, the intensity of cropping has increased from 122.9 in 1950-51 to 133.8 during 1970-71.  

The net area irrigated in Uttar Pradesh increased from 4,840 thousand hectares in 1950-51 to 7,219 thousand hectares in 1970-71. The irrigation potential created by the end of 1973-74 through major and medium works was 41.03 lakh hectares as against the fourth plan target of 46.19 lakh hectares. The Fifth Plan proposed to create additional irrigation potential of 32.85 lakh hectares through private works. In respect of irrigation facilities in Uttar Pradesh had 42 per cent of the cultivated area under irrigation in 1970-71. This State has the largest area (66 per cent) of the area under canal irrigation and about half of under tube-well irrigation in the country.  

The Intensive Agricultural Programme was initiated in 1960-61 in three districts. The programme was subsequently expanded in stages to another 13 districts. The object of this programme was to try to meet as far as possible all the

15 See Appendix Table A.XIII.
16 See Appendix Table A.XIV.
requirements of inputs in selected areas and to see how output responded to this type of effort. The result obtained varied a great deal from district to district but brought out clearly the high effectiveness of a coordinated effort in achieving better results in agricultural production. The concept of "Package" of inputs and of appropriate supporting measures which came to be established from 1964-65 on the programme called the "Intensive Agricultural Area Programme" were extended to several parts of the country. Programme of various high yielding varieties were extended to fairly large areas in 1966, and by 1967-68 over 6 million hectares were brought within its purview.

Concentrated efforts were made to increase agricultural production by increasing the use of inputs like improved seeds, fertilizers and irrigation facilities. A major breakthrough in agriculture was made, by introducing seeds of high yielding varieties together with complementary inputs. The area under high yielding varieties increased from 2.03 lakh hectares in 1966-67 to 25.77 lakh hectares in 1972-73. In absolute term the largest area under high yielding varieties of wheat in 1970-71 was in the State of Uttar Pradesh (about 2 million hectares); but it accounted for only 44 per cent of the total irrigated area under wheat in the State. Some progress was also made in paddy and maize in this regard.18

18 Agricultural Census 1970-71, Govt. of India, Ministry of Agricultural Irrigation, Department of Agriculture, New Delhi, September 1975, pp. 66-67.
The following table shows the increase in the average yield witnessed by the principal crops during 1950-51 to 1970-71:


<table>
<thead>
<tr>
<th>Crops</th>
<th>1950-51</th>
<th>1960-61</th>
<th>1970-71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>4.86</td>
<td>7.32</td>
<td>8.01</td>
</tr>
<tr>
<td>Juar</td>
<td>6.86</td>
<td>5.53</td>
<td>6.62</td>
</tr>
<tr>
<td>Bajra</td>
<td>6.44</td>
<td>3.94</td>
<td>7.87</td>
</tr>
<tr>
<td>Maize</td>
<td>7.85</td>
<td>5.95</td>
<td>11.90</td>
</tr>
<tr>
<td>Wheat</td>
<td>8.19</td>
<td>10.09</td>
<td>13.29</td>
</tr>
<tr>
<td>Barley</td>
<td>8.66</td>
<td>9.23</td>
<td>10.86</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>291.03</td>
<td>410.20</td>
<td>406.42</td>
</tr>
</tbody>
</table>


It would be evident from the above table that during the two decades from 1950-51 to 1970-71, there was substantial increase in the yield per hectare of all major crops and more in the case of rice and wheat, where the percentage increase in yield in 1970-71 over the period of 1950-51 were 65 and 62 respectively.

4.10 FINANCE

According to the fourth plan of Uttar Pradesh, during 18 years period (1951-69) as assistance of Rs. 822.6 crores was received by Uttar Pradesh out of a total central assistance...
of Rs. 6,226 crores to all the States. The share of Uttar Pradesh was only 13.2 per cent of country's population. In the matter of investment by financial institutions also Uttar Pradesh's share is very low.

Uttar Pradesh has been ill served by commercial banking system. There were 59 unbanked towns in Uttar Pradesh as of mid-April 1969 (unbanked towns are those towns where there is no office of a commercial bank). So far as rural sector is concerned, State occupied very low position in the ranking of States according to the development of banking facility. On the basis of number of villages, gross cultivated area and population, Uttar Pradesh has been ranked 12th in the list of sixteen States of India from the point of view of number of centres with banks in rural areas.

According to the Fourth Five Year Plan of Uttar Pradesh, the State contributed 7.9 per cent of the total deposits of the commercial banks but its share in the bank credit was only 4.1 per cent.

Thus we find that the financial resources available to Uttar Pradesh from various quarters in the period under review have been inadequate for the development of the State.

19 Reserve Bank of India, Bulletin, April, 1969.
20 A lot of progress in banking has since been made, Joshi, op.cit., p. 23.
4.11 GENERAL FEATURES OF UNEMPLOYMENT AND UNDEREMPLOYMENT

The major part of the economy is still underdeveloped and there is a vast mass of unemployment and underemployment. This has resulted in deficiency of income, aggregate demand and saving. There is also a marked deficiency of enterprise in the State.

According to 1961 Census, the total quantum of manpower in Uttar Pradesh was 39.23 million and total working force was 28.85. Of the total manpower about 86.89 per cent belonged to the rural areas and 13.11 per cent to the urban. This gave an overall rural-urban ratio of about 6.8:1.

The Table 4.7 derived from the 17th rounds of National Sample Survey (NSS) indicates that in the rural sector those who are working less than 28 hours or severely underemployed (23.83 per cent) and the gain fully employed, is about 29 per cent. As appears from the tables in the previous rounds, the position of rural employment is slightly better than the underemployment.21

It observed that on an average the working population of urban areas is engaged in their primarily occupations for 23

21 Among the recent estimates of the number of previous unemployed in the country are those of Raj Krishna. His estimates include the unemployed as well as those underemployed are available for additional work based on the average percentage derived from 17th to 19th rounds of NSS of the persons who are unemployed, severely underemployed (working for 28 hours or less in the reference week) or moderately underemployed (working for more than 28 but less than 42 hours in the reference week). Raj Krishana, Presidential Address, Indian Agricultural Economic Conference, Kanpur, December, 1972.
Table 4.7: Percentage of Gainfully Employed Persons in Uttar Pradesh Reporting Availability For Additional Work by Hours at Work: 1956-57 and 1961-62.

<table>
<thead>
<tr>
<th>Hours at Work</th>
<th>XI ROUNDS</th>
<th>XVII ROUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>Less than 28 hours</td>
<td>37.80</td>
<td>23.73</td>
</tr>
<tr>
<td>29-42 hours</td>
<td>30.58</td>
<td>31.04</td>
</tr>
<tr>
<td>43-56 hours</td>
<td>13.56</td>
<td>7.60</td>
</tr>
<tr>
<td>57 and above</td>
<td>3.59</td>
<td>7.90</td>
</tr>
<tr>
<td>Total</td>
<td>13.71</td>
<td>12.79</td>
</tr>
</tbody>
</table>


days in the month; while working population in the rural parts of the country is engaged only for 18 days. Obviously there is an incentive on part of rural population to move away from the cultivation of land and household occupations to non-agricultural occupations and from seasonal or intermittent work to regular employment. Support this belief is forthcoming from the results of enquiry on internal migration to urban areas in 1963-64, which showed 58 per cent, of migrants to urban areas are from rural areas of them (reporting occupation) 27.3 per cent were agricultural labour prior to migration.

22 Urban unemployment and employment in Uttar Pradesh, Quarterly Bulletin of Economic and Statistics, Directorate of Economic and Statistics, Uttar Pradesh, August-June, 1959.

23 National Sample Survey (NSS), Report No. 182, 18th round, P. 147.
Thus out of 1.07 million persons observed to have migrated in 1963-64 from rural to urban areas and many as 0.292 million were agricultural labourers prior to migration. This would account for about 1.90 million, agricultural labourers migrating to urban areas in the period of six and half years intervening between the Second Agricultural Labour Enquiry Report (ALE) and Rural Labour Enquiry Report (RLE).

As we have described in the preceding chapter, an agricultural labour household is one which derives a major portion of its income from wage-paid employment in agricultural operations. It can be seen from the table 4.8 that agricultural labour households formed 21.3 per cent of the total rural households in the country. More than half of the agricultural labour households do not own any land, thus making them dependent on wage-paid employment. The incidence of landless population also varies among agricultural labour households from state to state. While in Punjab roughly 88 per cent of the agricultural labour households have no land, the corresponding figures for Uttar Pradesh was 46.1 as Kerala was just 30 per cent.

It cannot be overlooked, however, that both men and women in agricultural labour households worked for part of the year.

24 N.S.S., Report No. 186, p.3.
<table>
<thead>
<tr>
<th>State</th>
<th>Percentage of agricultural labour households to rural households</th>
<th>Percentage of agricultural labour households without land</th>
<th>Size of agricultural labour households</th>
<th>Wage earners in agricultural labour households</th>
<th>Work participation rate in agriculture labour households (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>13.9</td>
<td>46.1</td>
<td>4.6</td>
<td>1.90</td>
<td>85 40</td>
</tr>
<tr>
<td>Bihar</td>
<td>28.0</td>
<td>37.5</td>
<td>4.8</td>
<td>1.84</td>
<td>86 43</td>
</tr>
<tr>
<td>Assam</td>
<td>4.9</td>
<td>43.2</td>
<td>4.5</td>
<td>1.72</td>
<td>84 37</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>31.4</td>
<td>65.4</td>
<td>4.1</td>
<td>2.30</td>
<td>90 78</td>
</tr>
<tr>
<td>Kerala</td>
<td>28.2</td>
<td>29.8</td>
<td>5.5</td>
<td>2.08</td>
<td>76 48</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>31.0</td>
<td>68.4</td>
<td>4.6</td>
<td>2.34</td>
<td>83 71</td>
</tr>
<tr>
<td>Punjab</td>
<td>14.3</td>
<td>87.7</td>
<td>5.5</td>
<td>1.77</td>
<td>82 20</td>
</tr>
<tr>
<td>All India</td>
<td>21.8</td>
<td>56.1</td>
<td>4.5</td>
<td>2.04</td>
<td>86 55</td>
</tr>
</tbody>
</table>

on different farms. This is reflected in the days of self employment as shown in the Table 4.9, for 25 days in a year, men workers were self employed, the corresponding number of women was 18. In Uttar Pradesh number of days self employed for 52 days in a year which is largest days among other States and unemployment was 35 days in the man, while men were gainfully occupied in Uttar Pradesh for 225 days in a year, working women in agricultural labour households were occupied for only 115 days.

This relatively higher incidence of unemployment of working women has not however, remained unnoticed. Raj Krishna's estimates for 1971 show that the incidence of both unemployment and underemployment is higher among women and the Bhagavati Committee's subsequent estimates for 1970-71 only confirm the findings.

In short, heavy pressure on land, together with small size of holdings, poor organisation and backward technique have resulted in chronic redundance of man power in agriculture. The surplus manpower in agriculture exists mainly because the growth of non-agricultural sector has not been fast.

<table>
<thead>
<tr>
<th>States</th>
<th>No. of days employed during the year</th>
<th>No. of days selfemployed during the year</th>
<th>No. of days unemployed during the year</th>
<th>Total No. of days employment was wanted</th>
<th>Proportion of unemployment days to total No. of days employment was wanted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  F</td>
<td>M  F</td>
<td>M  F</td>
<td>M  F</td>
<td>M  F</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>225  115</td>
<td>52  41</td>
<td>35  108</td>
<td>312  264</td>
<td>11.22  40.91</td>
</tr>
<tr>
<td>Bihar</td>
<td>222  134</td>
<td>25  20</td>
<td>70  103</td>
<td>317  257</td>
<td>22.08  40.88</td>
</tr>
<tr>
<td>Assam</td>
<td>297  249</td>
<td>10  6</td>
<td>17  43</td>
<td>324  298</td>
<td>5.25   14.43</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>231  118</td>
<td>24  14</td>
<td>16  99</td>
<td>271  231</td>
<td>5.90   42.66</td>
</tr>
<tr>
<td>Kerala</td>
<td>187  157</td>
<td>11  8</td>
<td>106  120</td>
<td>304  285</td>
<td>34.87  42.11</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>259  192</td>
<td>24  19</td>
<td>32  44</td>
<td>315  255</td>
<td>10.16  17.25</td>
</tr>
<tr>
<td>Punjab</td>
<td>305  184</td>
<td>7   16</td>
<td>27  59</td>
<td>339  259</td>
<td>7.96   22.78</td>
</tr>
<tr>
<td>All India</td>
<td>242  160</td>
<td>25  18</td>
<td>48  96</td>
<td>315  274</td>
<td>15.24  35.04</td>
</tr>
</tbody>
</table>

enough to provide employment to transferring numbers from agriculture there has been tendency in non-agricultural sector to release forces which have accelerated the pressure of population on land.

4.12 CONCLUDING REMARKS

Improved performance of agriculture in Uttar Pradesh in the period under review has changed development and the capabilities of the economy as a whole over the coming years.
4.13 INTRODUCTION

Over the past two decades, it has not been possible to expand work opportunities on a scale sufficient to provide for new entrants of labour force much less to reduce the back logs of unemployment. In varying degrees, in most parts of India the task of providing employment has become more difficult. The problem has special features for different sections of population, for instance, for small farmers, landless agricultural workers, rural artisans and persons engaged in traditional industries. Unemployment and underemployment of agricultural labourers lies at the root of the problem; this is not only by far the largest class in terms of numbers but also the class which receives, to the largest extent, all accruals, which result from the growing population and unemployment. There is enough problem of unemployment and underemployment in agriculture in Uttar Pradesh. An attempt is made in this section to assess the magnitude of unemployment and underemployment in the State during the Five Year Plans.

4.14 UNEMPLOYMENT AND UNDEREMPLOYMENT

While the state economy was in a state of economic slumber during 1971-76, it added 4.00 million to its labour force. Uttar Pradesh had a backlog of unemployment amounting to 9.46 lakhs during the Second Five Year Plan. Fresh entrants to the labour force during the Second Plan were 16.59 lakhs, so 26.05 lakh jobs were needed in the Second Plan for achieving full employment in the State. It is estimated that as against this requirement only 7.38 lakh additional jobs were created in the State during the Second Plan and thus the backlog of unemployment at the start of the Third Five Year Plan amounted to 18.67 lakhs. It means the backlog in the unemployment position in Uttar Pradesh in the Third Plan was double of that in the Second Five Year Plan while in India as a whole it was less than double. The following Table indicates the extent of unemployment during the Five Year Plans in Uttar Pradesh. The new entrants to labour force also continuously increased up to Third Five Year Plan.\(^{28}\)

The extent of underemployment in agricultural sector had not been estimated up to Second Five Year Plan, but a number of reports such as those of National Sample Survey, Agricultural Labour Enquiries and Director General of Employment and Training (D.G.E.T.) indicates that underemployment in rural areas of

Table 4.10: Extent of Unemployment During the Five Year Plans in Uttar Pradesh.

<table>
<thead>
<tr>
<th>Plan Period</th>
<th>Backlog of un-employment (in lakhs)</th>
<th>New entrants of labour force (in lakhs)</th>
<th>Additional employment created (in lakhs)</th>
<th>Total unemployed at the end of the Plan (in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.P.</td>
<td>India</td>
<td>U.P.</td>
<td>India</td>
</tr>
<tr>
<td>first Plan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Second Plan</td>
<td>9.46</td>
<td>53</td>
<td>16.59</td>
<td>117</td>
</tr>
<tr>
<td>Third Plan</td>
<td>18.67</td>
<td>90</td>
<td>21.50</td>
<td>170</td>
</tr>
<tr>
<td>Fourth Plan</td>
<td>10.00</td>
<td>115</td>
<td>41.00</td>
<td>230</td>
</tr>
<tr>
<td>Fifth Plan</td>
<td>19.00</td>
<td>160</td>
<td>35.00</td>
<td>-</td>
</tr>
</tbody>
</table>

Uttar Pradesh are widespread.\textsuperscript{29}

The estimates of the Directorate of Economics and Statistics of Uttar Pradesh in 1956-57, however, indicate that 25 per cent of the total labour force in the villages was underemployed and that was reduced to 14 per cent in 1959-60. In the year 1964-65 again a survey done by the Government of Uttar Pradesh, Directorate of Economics and Statistics on "Employment and Indebtedness in rural labour households in Uttar Pradesh", that 86.90 per cent agricultural labour households employed in agriculture, against 4.74 per cent in non-agricultural occupations as it is none, that there is a less opportunity of employment in non-agricultural pursuits in Uttar Pradesh due to lack of development in capitalist sector.\textsuperscript{30}

However, none of these estimates can be relied upon completely and it is difficult to come to any quantitative conclusion regarding the extent of the seasonal unemployment and agricultural underemployment. In some parts of Uttar Pradesh, the implementation of rural works project undertaken during Third Plan has brought forth reports of shortage of labour\textsuperscript{31} while

\textsuperscript{29} Third Five Year Plan, Planning Commission, Govt. of Uttar Pradesh, Volume I, p. 63.


\textsuperscript{31} An interesting case of this nature was noted in Mathura District of Uttar Pradesh, see, Planning research and Action Institute, Planning Department, Uttar Pradesh, Pilot Projects in Utilisation of Surplus manpower in rural areas of Uttar Pradesh (An evaluation study), Lucknow, 1962, pp. 43-46.
this can be explained as an erroneous selection of the project areas it is alleged that even in the areas with a high incidence of seasonal unemployment and single crop cultivation, and presumably, therefore with high incidence of seasonal unemployment and underemployment, the requisite labourers often do not come forth to work on rural projects.\textsuperscript{32}

So expansion of employment opportunities commensurate with the reduction in the labour force over the Plan period\textsuperscript{33} conceived as one of the employment objective before the state. Uttar Pradesh is to reduce the proportion of the population dependent on agriculture from the present level. It will be possible to employ the labour force in nonagricultural sector, but the fresh addition to the labour force was around 2.72, 3.51 and 4.75 million in the Third, Fourth and Fifth Five Year Plans of Uttar Pradesh.\textsuperscript{34} This was highest in the Uttar Pradesh among different States of India.

The yearly new entrants of labour force in the Third Five Year Plan in Uttar Pradesh were constant during 1962-65 but in the year 1965-66 it exhibited an increase of one per cent in

\textsuperscript{32} See Appendix Table A.XV for details.

\textsuperscript{33} In India, it appears that there was a shift towards agriculture between 1951-61, particularly due to the failure of the nonagriculture sectors to employ enough workers from the new entrants to the labour force. Economic Survey of Asia and Far East, 1964, United Nations Publication.

\textsuperscript{34} See Appendix Table A.XVI for details.
the total new entrants of the labour force. The estimated job requirements for the Third Plan was 40.17 lakhs, but in the consequences of Chinese aggression towards the end of the year 1962, the country resources had to be mobilised on a large scale for defence and other non-plan expenditure. The Chinese aggression was followed, at no considerable interval, by the hostilities with Pakistan in 1965. These two events cost a heavy shadow over the implementation of the Plan projects and a serious industrial recession commenced in 1966-67. This recession persisted till the end of 1967-68. As a result the unemployment and underemployment situation worsened considerably after 1965. It has been estimated that in the beginning of the Fourth Five Year Plan, the number of unemployment persons was about 10 lakhs in which rural unemployment has about 6 lakhs. Against this it is estimated that with an investment of Rs. 6,700 crores, employment opportunities for about 40 lakhs persons may be created during the Fifth Five Year Plan, leaving about 14 lakhs persons as unemployed or thinly employed at the end of the Fifth Plan.\textsuperscript{35} It means the rise in the unemployment and underemployment has been approximately five times over that First Five Year Plan.

4.15 EXTENT OF AGRICULTURAL UNEMPLOYMENT AND UNDEREMPLOYMENT AT THE COMMENCEMENT OF THE FIFTH FIVE YEAR PLAN

According to National Sample Survey (NSS) in Uttar Pradesh, \textsuperscript{35} Draft of Fifth Five Year Plan, Uttar Pradesh, \textit{op.cit.}, p. 97.
about 15 per cent of the working population had less than 42 hours' work in a week but more than 14 hours. All such persons are underemployed and their number in 1972 would stand around 22 lakhs. Of these 16 lakhs persons had work less than even 28 hours in a week and these persons could be stated to be extensively underemployed.

The intensity of unemployment and underemployment in agriculture in 1972 and at the commencement of the Fifth Five Year Plan could be summed up as in the Table 4.11.

From the Table 4.11 it can be inferred that there shall be an increase during the coming Plan period in the size of the unemployment and underemployment in both urban and rural areas. Keeping in view the broad observation of the Dantwalla Committee, it would be more appropriate to include unemployment and underemployment among the unemployed persons. Taking persons with work of less than 2 hours a day also as unemployed, the size of rural unemployment adds up to 13.5 lakhs. The number of intensely rural underemployment comes to about 15.5 lakhs since they had worked for 14 to 18 hours only in a week. In addition there were 26.7 lakhs persons who can be deemed to be

36 Draft of Fifth Five Year Plan, Uttar Pradesh, op.cit., p.269.
37 For details see Section I, Table 4.7 of the same chapter.
38 The distinction between seasonal unemployment and underemployment should be clearly recognised and it would not be appropriate to aggregate the estimates of full-time unemployment in terms of man-years, Dantwalla, M.L., "Report of the Committee of Experts on Unemployment Estimates", Planning Commission, Government of India, 1970, p.25.
### Table 4.11: Underemployment and Unemployment During Fifth Five Year Plan

<table>
<thead>
<tr>
<th>Items</th>
<th>Unemployment and under-employment in 1972</th>
<th>%</th>
<th>At the beginning of the Fifth Plan</th>
<th>%</th>
<th>% variation between 1972 &amp; the beginning of the Fifth Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Urban Areas</td>
<td>4.6</td>
<td>25.43</td>
<td>4.8</td>
<td>25.56</td>
<td>4.34</td>
</tr>
<tr>
<td>2. Rural Areas</td>
<td>13.5</td>
<td>74.57</td>
<td>13.9</td>
<td>74.44</td>
<td>2.96</td>
</tr>
<tr>
<td>3. Total</td>
<td>18.1</td>
<td>100.00</td>
<td>18.7</td>
<td>100.00</td>
<td>3.31</td>
</tr>
</tbody>
</table>

**UNEMPLOYMENT**

1. Intensity of under-employment in rural areas
   1. Intensity of under-employment in rural areas
   2. Other underemployed in rural areas
   3. Total

<table>
<thead>
<tr>
<th>Items</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>% variation between 1972 &amp; the beginning of the Fifth Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Urban Areas</td>
<td>25.43</td>
<td>4.8</td>
<td>25.56</td>
<td>4.34</td>
<td></td>
</tr>
<tr>
<td>2. Rural Areas</td>
<td>74.57</td>
<td>13.9</td>
<td>74.44</td>
<td>2.96</td>
<td></td>
</tr>
<tr>
<td>3. Total</td>
<td>100.00</td>
<td>18.7</td>
<td>100.00</td>
<td>3.31</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Draft of Fifth Five Year Plan, Uttar Pradesh Planning Department, Uttar Pradesh, Vol.I, p. 269.

**Note:** Col. 3, Col. 5 and Col. 6 are calculated by the author.
moderately underemployed because they had worked between
28-42 hours in a week. As far as the rural underemployment
in Uttar Pradesh is concerned, there is a 3.22 per cent varia-
tion in intensely underemployment and the moderately under-
employed variation is 3.37 per cent and on the whole rural
underemployment is 2.74 per cent variation between 1972 and
the beginning of the Fifth Five Year Plan. This is indicative
of the fact that in the coming year the magnitude of all
types of unemployment and underemployment will be on increase.

The advent of the high yielding varieties, however, raised
expectation of early and, one may say, a costless solution. The
new varieties "Generally require greater in production and allow
greater intensification thereby providing a basis for expanded
employment of agricultural labour. They can cause a shift in
the demand structure towards agricultural commodities which
require more labour."

This view is reflected in estimate
prepared by the National Commission on Labour that about half
of the additional labour force in Indian agriculture would be
absorbed in productive employment when the targets for the
HYVP and the intensive multiple cropping programme are achieved
by 1973-74.

39 John W. Mellor, "Report on Technological Advance in
Indian Agriculture as it relates to the distribution of

40 Government of India, Ministry of Labour, Report of the
In practice, apart from recent developments associated with high yielding varieties, the impact on rural employment has depended on extension of irrigation, through large and small works, development of economic and social overheads, the provision of means for individual farmers to increase agricultural output. Irrigation undoubtedly leads to changes in cultivation practices and crop patterns which increase the demand for labour. 41

4.16 CONCLUDING REMARKS

It can be concluded that there is a serious agricultural unemployment and underemployment conditions prevailing in Uttar Pradesh. It has been deteriorating in the State from one Plan to another. Planned development has failed in achieving any of the most cherished objectives. The number of unemployed and underemployed people has increased during the Plan period.

41 Ministry of Food, Agriculture, Community Development and Cooperation, Farm Management of India - A Study based on recent investigations, April 1966, pp. 46-47 and 59-93.
SECTION III

INVESTIGATIONS IN A FEW SELECTED VILLAGES IN DIFFERENT PARTS OF THE STATE

4.17 INTRODUCTION

Small farms have focussed most of the attention in the recent years specially for their low production and high man-land ratio. These two aspects are universal for our Indian conditions and have been judged by several studies. The statistics of 1971 Agricultural Census show that 73 per cent of the total farms in our country are below the average size of about 5 acres. Although much has been written about this there are limited empirical studies. Therefore, the objective of this survey is to review some of the empirical studies on agricultural underemployment in Uttar Pradesh. A few of such empirical studies on agricultural underemployment in Uttar Pradesh are by A.L. Agarwal, Ashok K. Singh, Abdul Qayum, R.D. Sharma, S.C. Mathur and Ashok K. Mitra.

4.18 AGARWAL STUDY ON ETAWAH DISTRICT

The study refers to a small village Birapur located in eastern corner of Etawah district, Uttar Pradesh. The village survey of cultivators, agricultural labourers, artisans and others has been done during 1966-67 according to their economic status like small, medium and large-size cultivators.

The employment data pertaining to each work of the agricultural as well as non-agricultural labour households were collected for four different weeks of four different months over the year. The reported hours of work spent on productive employment during the reference week, has been deducted from 56 hours, the standard time norm of work to obtain extent of underemployment. Agricultural labourer, who worked for less than 56 hours during the reference week were treated as underemployed, agricultural labourer, who worked more than 28 hours but less than 56 hours during the reference week were treated as moderately underemployed. Agricultural labourers who worked for 28 hours or less during the reference week were treated as severely underemployed.

He concluded that the month of July and May presented excess in the employment situation, employment per worker in July being about one third of that available in May. The months of November and January presented intermediate situations, the former being a moderate slack period and the latter a moderate peak. In the month of January there was no any severe underemployment, all the workers being moderately underemployed.

4.19 SINGH STUDY ON EASTERN UTTAR PRADESH

An attempt was made to find out surplus labour in agriculture in Eastern Uttar Pradesh in aggregate and over a period of one

year (1961-62). On the basis of the days for which workers report at work was taken in to account through total available labour days and total labour days required, by summing the total labour days needed for raising the various crops and days required for maintenance the cattle.

His conclusion was that only 50 per cent of the available labour days can be gainfully utilised in agriculture. Thus the surplus comes to 49.9 per cent which in terms of labour days is more than 90 crore days of work. In spite of the fact that Gorakhpur and Deoria are among the districts where total labour days required in agriculture are very high, these districts recorded highest amount of surplus. These districts are followed by Jaunpur, Basti and Azamgarh.

4.20 QAYUM STUDY ON UTTAR PRADESH.

In an article 44 Qayum studied three facets of under-employment in agriculture in Uttar Pradesh namely, visible, invisible and potential underemployment. He also defined chronic and seasonal contents of various forms of underemployment. Field investigations covering two months in 1955 were conducted in different government agricultural farms of Uttar Pradesh. Qayum interviewed number of agricultural families to find out their occupations, land use and labour movements. Other data was collected from secondary sources.

Qayum used the difference between the total available work force and the work force actually required in agriculture at the existing level of technique and organisation in estimating underemployment. He not only showed the magnitude of surplus labour power under existing conditions of production but he also tried to estimate the magnitude of underemployment when following changes were ushered in agriculture:

1) Use of nonpower implements that do not involve not additional outlay.

ii) When the size of holdings remains intact the individual farmers, cultivators independently.

iii) When farmers cultivate on cooperative basis on combined holding of not less than 10 acres.

iv) When power farming was introduced involving not additional outlay.

He concluded that agricultural employment could be expanded if the size of holding was 7 acres as a minimum. The agricultural development shall, however, be accompanied by the development of secondary and tertiary industries, the development of cottage and mechanised industries and the development of transport, etc., which may absorb surplus agricultural labour.

4.21 SHARMA AND MATHUR STUDIES ON MEERUT DISTRICT

An attempt was made in the year 1964-65 to study the extent of surplus labour on small farms in Meerut district approaches. The limit of small farms was fixed at half of the 'Plough

Unit,\textsuperscript{46} which varied from 6 to 10 acres in different zones. Farmers having less than one acre of land were not included in the study since they were not mainly farmers. The study was based on field data collected from 310 small farms, spread over 9 villages of Meerut District. The villages were selected by stratified random sampling and investigated by survey method. For stratification, the district was divided into blocks and zones: four blocks in sugarcane area and two zones under wheat on the basis of land utilisation, cropping pattern and irrigation resources. Sugarcane and wheat were the main crops of the district.

Surplus labour was estimated by the different approaches:

i) On the basis of actual amount of labour available and labour required in individual families;

ii) On the basis of plough unit for individual block/zone under study; and

iii) On the basis of deducting actual requirement of mandays from available mandays in the farming families.

With these different approaches to the surplus manpower measurement, the estimates differed even for the same period and in the same locality. In Meerut district on small farms, the surplus manpower were estimated as about half of the total earners dependent on farming, i.e., the then level of production could be maintained if half of the population of these earners was

\textsuperscript{46} Plough unit was defined as a part of land which can be managed by one plough with the help of average sized families; it provided full employment for two earners.
diverted from farming on those farms.

4.22 PANDEY, SHAH AND SINGH STUDIES ON UTTAR PRADESH

This paper studied on farm utilization of farm family labour with a view to quantify the surplus farm family labour on different farm sizes in different regions of Uttar Pradesh, and to investigate the prospects of its mobilization for accelerating the process of economic growth of the State. The total mandays of family labour available on farm was computed by multiplying the total working units in the farm family with 300 working days in a year. While calculating the total working units in the farm family, only those family members in the age group of 15-59 who were available for farm work on regular annual basis were accounted for. In the case of female members in the age group 50 per cent working days were considered.

The data used in the study in the year 1973-74 pertained to a sample of 309 farmers selected in three size groups, i.e., zero to less than 5 acres as small, 5 to less than 10 acres as medium and 10 acres and above as large, from four regions of the State, viz., Eastern, Central, Western and Bundelkhand of Uttar Pradesh.

It was observed that a wide variation in the percentage of surplus farm labourers among different size groups in a

different regions existed. The percentage of surplus farm labour was lowest in western region and highest in Bundelkhand region in all the respective size groups, indicating in general a high intensity of family labour use in the western region and a lower intensity in the Bundelkhand region. The extent of surplus farm family labour among different size groups varied from 17 per cent on the large farms to 53 per cent on the small farms in the Western region, from 42 per cent on large farms to 67 per cent on small farms in the Central region, from 39 per cent on the large farms to 60 per cent on the small farms in the Eastern region, and from 51 per cent on the large farms to 75 per cent on the small farm in Bundelkhand region.

They concluded that the prevailing family system and strong attachment to the agricultural employment came in the way of mobilizing surplus labour in agriculture. The workers needed some incentive to snap the ties of their traditional family system and strong attachment to be agricultural employment to go for work somewhere else. It was suggested that the workers would not go for the wage employment unless it gave additional remuneration to make up for the loss of advantages of the prevailing family system.

4.23 CONCLUDING REMARKS

From the foregoing discussions, it becomes quite clear that there is surplus labour in agricultural sector of Uttar Pradesh. It also appears to be true that there is a difference
between the slack and harvest period of time among the surplus agricultural workers. To verify the presence of this surplus a field survey was conducted in selected villages of Gorakhpur District in Uttar Pradesh. Its findings are reported in the next Chapter.