CHAPTER VII

Forms of Wage Employment in Varhad
A Case Study of Amravati District

In Chapter VI we dealt exclusively with the factors behind the incidence of agricultural labour in Berar/Varhad. We examine here the forms of employment of agricultural labourers in Varhad. The focus here is on two aspects. The first covers the changes in conditions of living and forms of employment in the context of a highly commercialised and stagnant agriculture. The second is a detailed account of the crop and operation specific nature of wage employment, which brings out the wide diversity of conditions in which labourers work in the area today.

Our discussion, particularly on the latter aspect, is based on a field survey of 11 villages in Amravati District in 1982/83. A necessary background for our discussion on the changes in forms of employment is an account of agricultural conditions in Varhad since 1947.

Stagnation in Agriculture since 1947

The experience of Varhad since Independence has been very much similar to that of other regions of rainfed agriculture in India. Left out by the Green Revolution technology with its emphasis on the seed-water-fertiliser package, yields have fluctuated from year to year.
year. The only source of growth has been an extension of cultivated area, and in Varhad this has been marginal. Expansion of irrigation has also been marginal, and Varhad remains a single crop season economy. In the context of an increasing population pressure on land, agricultural trends suggest a decline in per capita wage employment of agricultural labourers.

Net sown area (NSA) in all the districts of Varhad has increased since 1947-48 (Table 7.1). There have been differences between districts.

Table 7.1: Trends in Gross Cropped and Net Sown Area

<table>
<thead>
<tr>
<th>Average in years</th>
<th>All Varhad NSA</th>
<th>All Varhad GCA</th>
<th>Amravati District NSA</th>
<th>Amravati District GCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1947/48 to 1951/52</td>
<td>2.66</td>
<td>2.68</td>
<td>0.62</td>
<td>0.63</td>
</tr>
<tr>
<td>2. 1952/53 to 1956/57</td>
<td>2.79</td>
<td>2.82</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td>3. 1957/58 to 1961/62</td>
<td>2.86</td>
<td>2.90</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td>4. 1962/63 to 1966/67</td>
<td>2.93</td>
<td>2.97</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>5. 1967/68 to 1971/72</td>
<td>3.01</td>
<td>3.06</td>
<td>0.71</td>
<td>0.72</td>
</tr>
<tr>
<td>6. 1972/73 to 1977/78</td>
<td>3.06</td>
<td>3.17</td>
<td>0.71</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Source: (1) Agricultural Statistics of India, various issues
(2) Statistical Abstract of Maharashtra, various issues
(3) Socio-Economic Review and District Statistical Abstract of Amravati, Akola, Buldana and Yavatmal Districts, various issues

But on the whole NSA has increased at an annual average rate of 0.53% between 1947/48 and 1977/78, with the increase in Amravati district being of the order of 0.48% per annum.
Gross cropped area could have increased at a faster rate if there had been a substantial expansion of irrigated area. Yet, the pre-Independence situation continues to prevail at present; irrigated area occupies no more than 2.5% of gross cropped area (Table 7.2).

Table 7.2: Gross Irrigated Area as a proportion of Gross Cultivated Area in all Varhad Districts and in Amravati District

<table>
<thead>
<tr>
<th>Average in years</th>
<th>All Varhad Districts</th>
<th>Amravati District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947/48 to 1951/52</td>
<td>0.8</td>
<td>2</td>
</tr>
<tr>
<td>1952/53 to 1956/57</td>
<td>0.6</td>
<td>2</td>
</tr>
<tr>
<td>1957/58 to 1961/62</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>1962/63 to 1966/67</td>
<td>1.1</td>
<td>2</td>
</tr>
<tr>
<td>1967/68 to 1971/72</td>
<td>1.4</td>
<td>2</td>
</tr>
<tr>
<td>1972/73 to 1977/78</td>
<td>2.5</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Same as Table 7.1

This lack of development of irrigation is perhaps partly related to the absence of any large perennial rivers which could feed a canal system. At the same time, tank irrigation is absent and the few minor irrigation schemes that have been taken up, have contributed little to expansion of irrigated area. Private wells remain the predominant source of irrigation with 90% of the net irrigated area in Amravati district, for example, coming from this source (Table 7.3).

The limited expansion of irrigated area has meant that land can be cultivated only once a year—almost entirely under kharif crops.
Table 7.3: Source of Irrigation in Amravati District (1977-78)

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage of Net Area Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government Canals</td>
<td>negligible</td>
</tr>
<tr>
<td>2. Tanks</td>
<td>3</td>
</tr>
<tr>
<td>3. Wells</td>
<td>90</td>
</tr>
<tr>
<td>4. Other Sources</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Same as Table 7.1

with a negligible proportion of land under rabi crops. The index of cropping intensity is even now only 103 (Table 7.4) and the rate of expansion of GCA is not very different from that of NSA: an annual average rate of 0.55% in Varhad and 0.50% in Amravati (Table 7.1).

Table 7.4: Cropping Intensity (GCA/NSA) in all Varhad Districts and in Amravati District

<table>
<thead>
<tr>
<th>Average in years</th>
<th>All Varhad Districts</th>
<th>Amravati District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947/48 to 1951/52</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>1952/53 to 1956/57</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>1957/58 to 1961/62</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>1962/63 to 1966/67</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>1967/68 to 1971/72</td>
<td>102</td>
<td>101</td>
</tr>
<tr>
<td>1972/73 to 1977/78</td>
<td>104</td>
<td>103</td>
</tr>
</tbody>
</table>

Source: Same as Table 7.1
In contrast to the small rate of increase of cultivated area, the agricultural labourer population has increased considerably (Table 7.5). As we have argued earlier, the decade to decade variations in this increase need to be ascribed more to changes in Census concepts than to genuine changes in the occupational structure. Both the male and female labour populations have increased, by 27% and 14% respectively in Varhad (26% and 10% in Amravati).

Table 7.5: Agricultural Labourers in Varhad and Amravati (1951 to 1981)

<table>
<thead>
<tr>
<th>Years</th>
<th>Amravati District</th>
<th>All Varhad Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1951</td>
<td>1,42,708</td>
<td>1,60,195</td>
</tr>
<tr>
<td>1961</td>
<td>1,35,848</td>
<td>1,36,465</td>
</tr>
<tr>
<td>1971</td>
<td>1,69,279</td>
<td>1,38,147</td>
</tr>
<tr>
<td>1981</td>
<td>1,83,058</td>
<td>1,75,547</td>
</tr>
</tbody>
</table>

Source: Census of India, relevant years

This increase does reflect increase in population but it also brings out the failure of land reforms in providing land to the landless as also the failure of the non-agricultural sector to grow fast enough to provide alternative employment. Nanekar's study of land reforms in all of Vidarbha found that while tenanted land did fall in the 1950s, this was not because tenants acquired ownership rights "but because more and more land (was) taken away from them". And that the benefits of the tenancy reform of the 1950s accrued mainly, as in many other parts of
Inida, to those peasants who already owned some land, while the landless and poor peasants received little land. The laws passed on ownership ceilings have hardly fared any better. Ten years after the Ceiling Act of 1961, an official enquiry found that in the 4 districts of Warad only 13,035 ha had been distributed among 4,852 persons. And in Amravati district where as little as 2,489 ha had been distributed to 1,660 recipients, it was found in the 11 villages surveyed in 1982-83 that as few as 8 persons had received land appropriated under the Ceiling Act.

Given this failure of land reform it is but natural that land distribution is highly skewed. Thus in Amravati, operational holdings of an average size of over 10 ha, accounting for only 10% of the total agricultural holdings, occupy 40% of the operated area; while at the other end, 20% of the holdings having an average size of less than 1 ha occupy as little as 4% of the operated area (Table 7.6).

Table 7.6: Land Distribution (Operational Holdings) in Amravati District in 1970-71

<table>
<thead>
<tr>
<th>Size Class</th>
<th>Holdings (% of total)</th>
<th>Area (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.5 ha</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>0.5 - 1.0 ha</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>1.0 - 2.0 ha</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>2.0 - 3.0 ha</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>3.0 - 4.0 ha</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>4.0 - 5.0 ha</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>5.0 - 10.0 ha</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>10.0 - 20.0 ha</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>More than 20 ha</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The cropping pattern in present day Varhad continues as under colonialism to be dominated by cotton and jowar, although there has been a shift in favour of cotton. We had earlier seen that the Depression of the 1930's and World War II led to a decline in the area under cotton. Immediately after Independence, cotton area began to increase both in absolute and relative terms. The immediate impetus for this upturn was the transfer of the cotton growing areas of Punjab to Pakistan. Simultaneously, the shortfall in domestic availability of medium and long staple cotton induced a switch from cultivation of short staple varieties to medium and long staple cotton. Since then the area under cotton has increased, though there does seem to be a slight falling off in this expansion since the early 1970s. The expansion of cotton has been partly at the expense of jowar, but the two together continue their predominance in the cropping pattern (Table 7.7).

Although cotton covers close to half of cultivated area, yields continue to be low and fluctuate from year to year. Cotton yields in Varhad, for that matter in the entire state of Maharashtra, compare poorly with the Indian average. In 1984/85, the yield in Varhad was 74 kg/ha (lint cotton) compared to the all-India average of 193 kg/ha and as much as 447 kg/ha in the high growth states of Punjab and Haryana. The trend since 1947-48 presents a dismal picture: though there has been a shift in favour of long staple cotton and a limited adoption of high yielding varieties, yields in the early '80s in Varhad were not very much different from those three decades earlier (Graph 7.1). This
Graph 7.1: Index of Cotton Productivity in all Varhad Districts and in Amravati District, 1950/53 to 1980/83

(3 year moving averages, 1950/53 = 100)

Sources: 1. Indian Agricultural Statistics, various issues.
2. Agricultural Situation in India, various issues.
Table 7.7: Cropping Pattern: Area under Cotton and Jowar in Varhad and Amravati District

<table>
<thead>
<tr>
<th>Average in years</th>
<th>All Varhad Districts</th>
<th>Amravati District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cotton as % of GCA</td>
<td>Jowar as % of GCA</td>
</tr>
<tr>
<td>1947/48 to 1952/53</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>1953/54 to 1957/58</td>
<td>45</td>
<td>37</td>
</tr>
<tr>
<td>1958/59 to 1962/63</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>1963/64 to 1967/68</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>1968/69 to 1972/73</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>1973/74 to 1977/78</td>
<td>37</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: 1. Sources: Same as Table 7.1

2. Other crops in Amravati District in 1977/78 included wheat (6%), pulses (10%) and oilseeds (7%), a distribution which has changed little since 1947/48 when the respective shares were 3%, 7% and 10%.

stagnancy in the productivity of cotton must be attributed to the almost exclusive rainfed cultivation of cotton.

It has been estimated that over 80% of the growth in Indian cotton yields between 1960-61 and 1978-79 was induced by the spread of irrigated cotton and the application of the complementary inputs of improved seed and fertiliser. Thus in states with the highest yields, namely Punjab, Haryana, Tamil Nadu and Gujarat - the proportion of cotton area irrigated varies from 45% to 98%. Again states with a very high growth in productivity are states (Andhra Pradesh and Gujarat) where the proportion of cotton
area irrigated has increased from 1% to 44% and from 8% to 22%
between 1960-61 and 1978-79 respectively. On the other hand, states
like Maharashtra where the yields are the lowest and where the growth
in productivity is almost non-existent are also the states where
irrigated cotton occupies no more than 7% - 6% of total cotton area.4/5

The availability of irrigation is clearly crucial to raising
productivity of cotton cultivation. To be more specific, the availability
of irrigation makes possible a successful adoption of the 'new' technology
in cotton cultivation. With the only technology available for raising
productivity being that based on the seed-water-fertiliser mix, regions
which do not have any irrigation potential suffer from stagnant productivity.
So a region like Varhad, where over 95% of cultivated area is under rainfed
conditions and where as little as 0.2% of cotton area is irrigated have
little prospects for any rise in productivity. What is even more striking
about cotton yield is its violent fluctuations from year to year (Graph 7.1).
This again must surely be due to the overwhelming dependence on the un-
certainties of rainfall.5/

This stagnant and perhaps even declining productivity marks the
agriculture of the entire region. The Bhalla-Alagh district-wise study
of agricultural growth found that the four Varhad districts had not only
some of the lowest levels of productivity but also experienced a negative
rate of growth of output between 1962/65 and 1970/73. The decline in its
productivity overshadowed the increase in cultivated area and the shifts
in cropping pattern (Table 7.8).
Table 7.8: Growth of Agricultural Output in Varhad and Decomposition of Growth Rate (1962-65 to 1970-73)

<table>
<thead>
<tr>
<th>District</th>
<th>Exponential Annual rate of growth °C</th>
<th>Percentage Contribution to Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area</td>
</tr>
<tr>
<td>Amravati</td>
<td>-3.43</td>
<td>3.15</td>
</tr>
<tr>
<td>Akola</td>
<td>-5.23</td>
<td>6.73</td>
</tr>
<tr>
<td>Buldana</td>
<td>-4.09</td>
<td>0.08</td>
</tr>
<tr>
<td>Yavatmal</td>
<td>-0.56</td>
<td>137.09</td>
</tr>
</tbody>
</table>


We have thus in Varhad a limited expansion of cultivated area, a shift towards cultivation of a more labour intensive crop and levels of cotton productivity which are stagnant if not declining. In addition, rising population pressure has led to subdivision of holdings. Between 1970/71 and 1976/77 alone, the average size of operational holdings fell from 4.2 ha to 3.6 ha in Amravati District. This decline in holding size must have led to a decline in the extent of use of hired labour, though the Farm Management Studies (FMS) of the 1950s showed that even small holdings employed a considerable amount of hired labour (See Table 7.9 below).

In all these trends only the shift in cropping pattern and the limited increase in cultivated area would have contributed towards
augmenting the demand for hired labour. The FMS did show in the 1950s that the quantum of hired labour use was close to three times that of family labour (See Table 7.15 below). But in comparison to the growth of the agricultural labourer population there seems little doubt that the per capita annual employment of agricultural labourers must have declined.

Changes in the Forms of Employment of Agricultural Labourers

In discussing changes in the forms of wage labour employment we will first examine changes in permanent farm labour contracts and then changes in casual labour contracts. Our evidences on wage contracts in the colonial era is admittedly scanty, but certain well defined processes can be discerned.

Saldars or Permanent farm labour

Saldars (literally, workers employed for a year) were often life-long, sometimes even hereditary, employees of the richer peasants. Like their counterparts elsewhere in the country (e.g. the Halis of Gujarat, the Siris of Punjab and the Padiyals of Tamil Nadu) debt peonage was a common characteristics of saldari form of employment. A loan taken would be the beginning of life long employment. A saldar, in some places, was commonly driven to accept service by the need of a large sum of money. Wages were paid in cash and kind, sometimes half the yearly salary would be paid in advance, at other times a monthly wage would be paid. The relationship was highly 'paternalist':
employers gave customary gifts to the labourers during the major
festivals. A 'combination wage of cash, food and perquisites' known
as khaun, püm pach rangram thevita (meal, drink, five articles of
dress and keep) was common.

Yet, by the early 20th century the terms and conditions were
changing. Firstly, saldars were increasingly employed for the agri-
cultural year from June to May. Secondly, they would often change
their employers; few remaining with the same employer for more than
three years. Thirdly, payment of wages entirely in cash was slowly
beginning to replace the earlier cash-cum-kind wage. Fourthly, some
of the common characteristics of 'unfree labour' were beginning to
disappear, e.g. "the wives of farm-servants do not necessarily work
for their husbands' masters."

It would be erroneous to infer that the saldari form of
employment gradually became completely contractual in nature, without
any of the trimmings of paternalistic relations. Even today the older
labourers in Amravati remember "when a landlord's prestige depended
not so much on the amount of land or the number of bullocks he had
but (on) the number of saldars he 'possessed'." But the beginnings
of this change (most probably restricted to employment by only certain
sections of the peasantry) are important inasmuch as they were undoubtedly
brought about by the close interaction with the market. In many respects
the mutation of the traditional form of employment is akin to the
transformation of the sirî form of employment in the Punjab of the
1920s - agrarian expansion linked to the demands of the market made rich peasants adapt and transform an earlier paternalist relation into a 'contractual' one.14/

By the 1950s there had been further changes in this form. The FMS showed that farm servants, who were employed mainly by the largest cultivators, still accounted for 13% of total farm hours worked in the surveyed villages (See Table 7.15 below).

Yet, not all these farm servants were saldars. Increasingly most of them were mahindars - employed by the month rather than by the year. Their number fluctuated with the season, being higher in the busy months and lower in the slack seasons.15/ In the villages covered by the FMS in Amravati in 1955-56, hours worked by farm servants in the slack season between January and May accounted for 30% of the annual hours put in.16/

This change in form and decline in significance of saldari continues to the present day. In our field survey conducted in Amravati in 1982/83, we found that saldars had completely disappeared in 4 of the 11 villages surveyed and in the others there were no more than 4 - 5 saldars. Generally, saldars have been replaced by mahindars whose numbers seem to have gone up over time. Employed by the biggest cultivators in a village, their 'contracts' are renewed by the month and their wages paid entirely in cash. Some are employed throughout the year, but many find that they are not required for 3-4 months in a year. In their place, teenage youth are employed at a much lower wage to tend to the minimum of chores that need to be done during the non-agricultural season.
A striking illustration of how the traditional relation between
the labourer and his employer has been shown of all trimmings of
customary obligations and rights is the phenomenon of employment of
ghaddis. In the employment again of only the richest cultivators
in a village, a ghaddi (meaning 'our man') works on a regular basis,
out
in some instances through the year, as a daily labourer. In this
subtle replacement of annual saldari employment, ghaddis work longer
hours than a daily labourer at a marginally higher daily wage and are
expected to do the work normally expected of a saldar. It is clear to
both the employer and the labourer that not only is this a daily
employment (a cash wage paid daily or weekly) that can be terminated
at any time, but more important, there are no customary rights or
obligations on the part of the employers. In the cultivator's eyes,
a ghaddi is a daily labourer with no additional privileges or rights.

The perception of employers and labourers on the reasons for the
decline of the saldari form of labour, as revealed during our field
survey, reflect a realisation by employers that it is now more economical
to have the same work done by mahindars or ghaddis.

Employers speak of a declining profitability in agriculture which
makes it uneconomical to employ labourers on an annual basis. Furthermore,
what was earlier considered part of a socially prescribed norm of behaviour
is now seen as a 'burden' by the employers. The customary 'gifts' to
saldars as well as expected provision of assistance whenever required
are now considered avoidable burdens.

Clearly, though the earlier form of saldari employment has all but
disappeared; it now survive in a different form. The employment of monthly labourers and of ghaddis reflects the continued though reduced need of the large landowners for semi-permanent labour to perform the regular agricultural and non-agricultural tasks that still need to be done throughout the year. A century of market involvement, predominance of the cash nexus and most of all, an acute awareness of income and expenditure in stagnant agricultural conditions have forced the landowners to give up the traditional saldari relation and transform and adapt it to the contemporary situation.

Casual labour

The most important form of employment of hired labour is that of casual labour. The FMS surveys showed that not only did casual labour provide more than half of all labour hours worked on farms, but also that it was important even on small holdings (Table 7.9). However, casual labour does not comprise a homogenous category. There are differences in the form of employment, and mode of wage payment between crops and operations.

Some of the colonial accounts of casual labour employment and wages make no reference to such differences. Thus, around 1870, field labour was believed to be paid in kind and by the day.\textsuperscript{17} Some others refer to practice of payment of cash wages in ploughing, sowing and weeding and in kind for harvesting crops, though labourers are still employed by the day.\textsuperscript{18} But the Gazetteers of the early 20th century come up with more detailed descriptions which suggest a system that varied from operation to operation.\textsuperscript{19}
Table 7.9: Distribution of hours of farm work in different landholding size classes in Amravati District, 1956-57

<table>
<thead>
<tr>
<th>Size of holding (hectares)</th>
<th>Family labour</th>
<th>Farm servants</th>
<th>Casual labour</th>
<th>On exchange or gratis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>36</td>
<td>9</td>
<td>55</td>
<td>*</td>
<td>100</td>
</tr>
<tr>
<td>2-4</td>
<td>38</td>
<td>5</td>
<td>57</td>
<td>*</td>
<td>100</td>
</tr>
<tr>
<td>4-6</td>
<td>48</td>
<td>1</td>
<td>51</td>
<td>*</td>
<td>100</td>
</tr>
<tr>
<td>6-9</td>
<td>51</td>
<td>-</td>
<td>46</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>9-12</td>
<td>24</td>
<td>13</td>
<td>61</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>12-16</td>
<td>59</td>
<td>5</td>
<td>36</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>16-20</td>
<td>6</td>
<td>20</td>
<td>74</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>20+</td>
<td>14</td>
<td>21</td>
<td>65</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>All size classes</td>
<td>27</td>
<td>13</td>
<td>60</td>
<td>*</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: 1. * indicates negligible

2. Source: Computed from tables A4-6-1B and A4-6-2B of Farm Management Studies in Madhya Pradesh 1956/57, op.cit. pp.192-195.

Some of the colonial accounts of casual labour employment and wages make no reference to such differences. Thus, around 1870 field labour was believed to be paid in kind and by the day. Some others refer to practice of payment of cash wages in ploughing, sowing and weeding and in kind for harvesting crops, though labourers are still employed by the day. But the Gazetteers of the early 20th century come up with more detailed descriptions which suggest a system that varied from operation to operation.
In ploughing and sowing labourers were hired by the day and their wages paid in cash. Women were employed to assist in sowing operations. Weeding was almost always done only by women and their wage paid in cash on a daily basis. When rains were excessive and immediate weeding was imperative, both men and women would be employed; the operation being done through a contract with the wage based on the area to be weeded. It was in the harvesting of crops that the most intricate system of work organisation and wage payment had been adopted. Cotton picking was always done by women. The cotton plant would be picked 4 to 5 times each season; in the first picking women would be paid a daily wage, in the second and third they would be paid a share of the produce and in the end again a daily wage. Wage payment was in kind for the second and third pickings, and at times in cash for the others. There were differences between areas, but on the whole there was a tendency towards payment entirely in cash. In the harvesting of jowar, on the other hand, wages were paid entirely in kind and as a share of the produce. However, unlike in cotton picking where women were employed individually, a team of workers was jointly employed for harvesting jowar. Furthermore, this operation was split up into different components, all but one operation being done solely by men.

In our discussion of contemporary work and wage systems in Amravati we will see that existing practices have directly evolved from those prevalent in the early 20th century. More than establishing
the links between existing and past forms of employment, we will argue that the diversity of forms of work organisation has much to do with the crop, operation and level of yields. In addition, it appears that given the landowners' desire to effectively control the quality of work and the pace at which it is done and labourers' corresponding efforts in fighting this control, the configuration of forces between employers and employees in turn influences and mutates the form of employment over time and space.

But before that a brief discussion of trends in wages before and after Independence.

Movement of Real Wages

We examine here the movement of real wages in three sub-periods:

(1) 1869/70 to 1880/81
(2) 1892 - 1926
(3) 1956/57 to 1978/79

We look at the movement of the daily wage of male agricultural labourers within each sub-period rather than over the much longer period, mainly because of the differences in method of collection of wage data in each of the three sources. One should also note that while in each case both cash and kind wages were supposedly considered in the computation of the money wage rate, the diversity of forms of employment and mode of wage payment would cast doubts on the veracity of the wage data of the category of 'unskilled labour'. It is only for the third sub-period where we have considered the wages of field labour in the months of July/August that this problem is somewhat obviated.
Graph 7.2: Index of Daily Wage Rate of Agricultural Labourers in Berar, 1869/70 to 1880/81

(1869/70 = 100)

Source: Census of India (1881) - Berar, pp.233-236.
Graph 7.3: Index of Daily Wage Rate of Agricultural Labourers in Amravati District, 1891/92 to 1925/26

(1891/92 = 100)

Source: Central Provinces District Gazettes: Amravati District and Statistical Addendum.
Graph 7.4: Index of Daily Wage Rate of Agricultural Labourers in Amravati District, 1956/57 to 1978/79

Source: Agricultural Wages in India, various issues.
Questions of data apart, one should consider the following factors in attempting to understand the trends in real wage. In the late 19th and early 20th century, the wage rate would often depend on the relative 'availability' of labour in relation to the condition of the crop season. Continuous rains in the middle of the weeding season could sharply drive up wage rates. Calamities like the famines at the run of the century or the influenza epidemic of 1919 could cause widespread starvation and death and a subsequent 'shortage' of labour. Secondly, since agriculture was always dependent on the extent of precipitation, a poor monsoon would depress the real wage through a reduced demand for hired labour and a high price of jowar, the main food crop of the area. In the more recent decades, the absence of any organised political activity among the agricultural labourers has meant that the movements in the real wage accompanied fluctuations in productivity. Graphs 7.2-7.4 present the real daily wage along with the money wage and the price of jowar in each of the three sub-periods.

The most noticeable feature is the year to year fluctuations rather than any discernible trend in the real wage. In the period 1892-1926, real wages do seem on the whole higher towards the end of the period. But one must remember that these were the years of the second cotton 'boom', while the late 19th century was marked by periodic famines. In the period 1957-1980, the fluctuations continue with the fall in the real wage being very sharp during the droughts
of the early 1970s which were particularly severe in Maharashtra.

One can also note that while in years of declining jowar prices the money wage also falls, the money wage does not always rise in years of rising jowar prices.

The Crop Calendar and the Agricultural Work Process.

For a meaningful discussion of the variations in forms of employment we need to arrange our discussion around the crop calendar (Table 7.10) of the two main crops, viz. cotton and jowar.

Table 7.10: Crop Calendar of the two main crops in Amravati

<table>
<thead>
<tr>
<th>Month</th>
<th>Cotton</th>
<th>Traditional Jowar</th>
<th>Hybrid Jowar</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>Ploughing, Sowing</td>
<td>Ploughing, Sowing</td>
<td>Ploughing, Sowing</td>
</tr>
<tr>
<td>July</td>
<td>Sowing, Weeding</td>
<td>Sowing, Weeding</td>
<td>Sowing, Weeding</td>
</tr>
<tr>
<td>August</td>
<td>Weeding</td>
<td>Weeding</td>
<td>Weeding</td>
</tr>
<tr>
<td>September</td>
<td>Weeding</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>October</td>
<td>Weeding</td>
<td>-</td>
<td>Harvesting</td>
</tr>
<tr>
<td>November</td>
<td>Picking</td>
<td>Harvesting</td>
<td>Clearing of Land,</td>
</tr>
<tr>
<td>December</td>
<td>Picking</td>
<td>Harvesting</td>
<td>Threshing</td>
</tr>
<tr>
<td>January</td>
<td>Picking</td>
<td>Clearing of land,</td>
<td>Threshing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Threshing</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>Clearing of land</td>
<td>Threshing</td>
<td>-</td>
</tr>
<tr>
<td>March</td>
<td>Clearing of land</td>
<td>-</td>
<td>(Deep) ploughing</td>
</tr>
<tr>
<td>April</td>
<td>(Deep) ploughing,</td>
<td>(Deep) ploughing,</td>
<td>(Deep) ploughing</td>
</tr>
<tr>
<td></td>
<td>ploughing</td>
<td>ploughing</td>
<td>ploughing</td>
</tr>
</tbody>
</table>

Source: Field Survey, 1982-83
We present below a somewhat lengthy description of the work process and forms of hired labour employment in each operation. The forms of employment outlined below need to be seen really as a 'basic model', the differences between villages being presently ignored. The focus is also on casual labour employment.

**Ploughing:**

Ploughing, which is done entirely by males, can be of two kinds. The first, wakhār, is done every year with each field ploughed two or three times. The wakhār is a shallow plough with the blade going in no more than 3-4 inches. It is driven by a pair of bullocks. Normally one person is employed to do the ploughing. Work on one acre can be completed on one day. Nangar is deep ploughing and done once every three to four years. Nangar requires two and sometimes even three pairs of bullocks and at least two workers. It takes two days to carry out this operation on one acre. For ploughing, labourers are employed on a daily basis and wages paid in cash. When the cultivator has to hire a pair of bullocks, a fixed sum depending on the area to be ploughed is paid. In 1982/83 the daily wage rate in wakhār was typically Rs.5-6 and in nangar about 25% more.

**Sowing:**

Sowing begins in June with the commencement of the monsoon. It is done with a seed drill (tiphan) which is bullock driven. The bullock driven seed drill is followed by two pairs of bullocks with wakhārs to cover the sown area and level the ground. Women are employed to operate
the *tiphan* which requires three women in cotton and only one in jowar. On the whole, sowing is done by teams of three women and three men (cotton) and one woman and three men (jowar). All of them are employed by the day and their wages paid in cash. The daily wages for men and women at the time of the field survey were Rs.5-6 and Rs.2.50 - 3 respectively.

**Weeding**

Weeding is done over four months between July and September. Two kinds of weeding are done. One is hand weeding (*nindan*) and the other is a blade driven by a pair of bullocks (*dawrah*). While the *dawrah* is employed to remove weeds between rows, *nindan* is used to remove weeds close to the plants. The number of times a field is weeded depends on the quantum of rain during these months as well as on the length of the breaks between showers. In cotton, *nindan* is done four to five times and *dawrah* six to seven times. In jowar they are done two to three times and three to four times respectively. *Nindan* is done only by women, with upto 20 women working at a time on 1 acre. Women labourers are employed either individually or in teams. In both cases, wages are paid daily and in cash. Teams are employed when the growth of weeds is excessive and a large number of women are needed. Women's wages range between Rs.3 and 4 per day. *Nindan* is done only by women, with upto 20 women working at a time on 1 acre. Women labourers are employed either individually or in teams. In both cases, wages are paid daily and in cash. Teams are employed when the growth of weeds is excessive and a large number of women are needed. Women's wages range between Rs.3 and 4 per day. In *dawrah* only one male worker (to drive the bullock pair) is employed. He is also employed on a daily basis and his wages (Rs.6) paid in cash.
Harvesting.

Cotton and jowar mature at different times, so harvesting/picking operations are spaced out. Hybrid jowar matures in October and traditional jowar in November. The cotton crop gives six to seven pickings over a period of three months between and October and end January. The first point to note here is that there is a clear-cut sexual division of labour. Cotton picking is done only by women. Harvesting operations in jowar, on the other hand, are done almost entirely by men except for one operation which is done only by women.

The cotton plant gives six to seven pickings with low yields in the first and last pickings. The form of payment depends on which of the pickings is in progress. For the first and last, when yields are lower, wage payment is based on a time-rate and is in cash. For the others, women are employed on a piece rate and their wages again paid in cash. The piece rate also varies according to the variety of cotton. The piece-rates paid for picking the newer high-yielding variety are less than these for picking the traditional variety. The time wage rates are, however, the same. Daily earnings are usually Rs.2.50 – Rs.3.00 in the first and last pickings and Rs.4-5 in the others. Jowar harvesting consists of four distinct and sequential operations; the stalks are cut, the bushels of jowar then removed, the stalks (used as fodder) made into bundles and finally stacked in the field. The removal of bushels is done only by women.
while the other three operations are carried out by men. For the latter, work is handed over to a team of male labourers and the entire job paid for in one lumpsum. Payment is in kind and generally based on the area to be harvested. Normally, a team of 3-4 men can complete harvesting four acres in three days. Women, on the other hand, are employed by the day and receive a time-rated kind wage. The daily earnings for men normally work out to be between Rs. 7-8 and for women around Rs. 3.

Other Operations

Wheat is sown in November/December and harvested in March/April. Wheat cultivation is possible only if either the land has been left fallow during the kharif season or planted with hybrid jowar. On fields where cotton or traditional jowar are grown, harvesting/picking is followed by clearing the field - done partly by a bullock driven wakhar and partly by women labourers.

In this 'basic model' of forms of casual labour employment itself one can see the diversity of forms between operations and crops. In actual fact, the diversity across villages is even wider. Thus, in the harvesting of jowar what we have described appears to be the traditional system of work organisation. However, in recent years in some villages the introduction of new hybrid jowar has led to wages being determined as a share of the produce and not in relation to the area sown. In some other villages the area criterion is still followed for hybrid
Table 7.11: Typology of Villages Surveyed

<table>
<thead>
<tr>
<th>'Advanced' Villages</th>
<th>'Intermediate' Villages</th>
<th>'Backward' Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pathrot</td>
<td>1. Dawargaon</td>
<td>1. Ihotra</td>
</tr>
<tr>
<td></td>
<td>4. Talegaon Thakur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Chodasgaon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Sasang</td>
<td></td>
</tr>
</tbody>
</table>

The time bound nature of each agricultural operation makes it imperative to control the pace of work. In addition, work completed in a shorter duration by the same number of workers reduces the wage cost. However, work should also not be speeded up so much so as to affect the quality of work.

From the standpoint of an employer, piece-work contracts may appear to be the ideal form of employment. A low enough piece-rate will hold down the wage bill as well as increase the pace of work without requiring close supervision to reduce delays. But all work cannot be handed out on piece or share-based work contracts. In certain types of work quality can suffer as the pace is accelerated. In others, it may not be possible to directly measure 'output'.

Thus in Amravati operations like ploughing, sowing and weeding are never handed out on a piece-rate basis. Labourers are always hired by the day and their work closely supervised. Even when work
is handed out on an area-basis as is the case in weeding (nindan) at times, there is constant monitoring of the team of workers so that a crucial operation is not done perfunctorily.

The result of piece-rating of all kinds of operations is brought out in Martinez-Alier's study of work organisation in southern Spain. The under pressure from workers, almost all work is done on a piece-rate basis:

"When a landowner tried to have his cottonfield weeded by piece-workers, he complained that it is difficult to find a responsible team of workers, who will weed properly without going too fast. Fast workers are liable to pretend that the weeds have been pulled out while they really have been hidden by throwing earth on top."

On the other hand, cotton-picking is the ideal type of work to be handed out on a piece-rate basis. Here the work done is easily quantifiable and in an effort to increase their earnings labourers speed up their work. The quality of work is not affected by its pace and the only supervision required is for the purpose of preventing 'theft'.

In pointing to employers' preferences in the choice of forms of employment, one should note that labourers in Amravati (like those in southern Spain) are almost unanimous in their view that inasmuch as employers do not closely supervise work done under piece or sharework, such contracts are infinitely superior to other kinds of work. This preference exists in spite of the fact that on piece-rates
labourers invariably work longer hours at a considerably higher pace. If the number of hours worked is considered, the hourly wage in cotton picking, for instance, actually works out to be the same as time based employment (See Table 7.12 below). Labourers are not unaware of this longer duration and faster pace, but freedom from interference appears to be highly prized.

However, labourers' inability to raise piece-rates can result in a preference for time-based employment which leaves employers' wage costs unchanged. In addition, landowners' ability to lower piece-rates can at times also hold down wage costs when there is a switch to a higher yielding crop/variety. This can be seen in the variation in the form of employment across individual pickings and between traditional and hybrid cotton.

Of the six to seven pickings that the cotton plant offers each season, yields in the first and last are considerably lower. Since piece-work at the usual rates would provide a lower daily wage, labourers protest against the use of piece rates on these two occasions. Employers on the other hand refuse to raise the piece-rates for these two pickings, fearing that these could become the rates for the other pickings as well. So both sides settle for time rates in the first and last pickings. Yet, in the early 20th century piece-rates did vary between pickings:

.... the rate is from 1/20 to 1/10 of the cotton collected. If the rate for the first picking is 1/20, that for the second would be 1/10. The rate for the final picking is sometimes as much as 1/2.
However, employers show no hesitation in lowering piece-rates for hybrid varieties arguing that since the cotton bolls of these varieties are larger, less effort is required to pick the same amount of cotton. The outcome in both instances is that landowners are able to keep hourly wage costs almost unchanged (Table 7.12).

Table 7.12: Women's Wage Earnings on Piece and Time Rates - Dawargaon Village (1982/83)

<table>
<thead>
<tr>
<th>Operation</th>
<th>Picking of traditional variety of cotton (L-147)</th>
<th>Picking of Hybrid variety of cotton (H4)</th>
<th>First and last picking of both varieties (nindan)</th>
<th>Weeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piece-rate</td>
<td>25 paise/kg</td>
<td>20 paise/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Amount of cotton picked/day</td>
<td>12-15 kgs</td>
<td>15-20 kgs</td>
<td>6-7 kgs</td>
<td>-</td>
</tr>
<tr>
<td>Hours worked</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Daily wage/earnings (Rs.)</td>
<td>3.00 - 3.75</td>
<td>3.00-4.00</td>
<td>2.50-3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Wage/Hour (paise)</td>
<td>30-38</td>
<td>30-40</td>
<td>32-43</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Field Survey

A similar tussle between the labourers and their employers seems to determine the variations in forms of employment and quantum of payment in jowar harvesting. The traditional form of this contract where, as we have seen, a team of male workers is employed for three of the four
jobs, is neither piece-work nor time-based employment. It is more akin to a contract or a joint group piece-rate.

In harvesting of jowar there is no possibility of a dispute over the quality of work done and there is no need for close supervision. Furthermore, since the contract is not time-based it is not in the interests of labourers to delay its completion. Work is contracted out for all three jobs together probably because the three distinct operations are to be done more or less simultaneously and workers in a team are likely to better co-ordinate their work than labourers employed individually and by the day for each operation.

The traditional form of usual labour employment in jowar harvesting (T1 and H1 in Table 7.13) is the one described earlier. Today as many as four different types have evolved from this original form, so much so that in the 11 villages studied, the traditional form was all-pervasive in only two villages and co-existed with other forms in two others.

Common in four villages (Gangja, Anchalwadi, Khed and Chodasgmon— all 'advanced' or 'intermediate' villages) are contracts T2 and H2 where the wage for the team employed is a share of the produce harvested in both traditional and hybrid jowar. The traditional area based contract is always open to dispute since the wage therein is primarily dependent not so much on an estimate of the yield (therefore not on the extent of work involved) but on the area sown.

With the introduction of hybrid jowar wherein the work involved was as yet uncertain, labourers in these four villages demanded that
Table 7.13: Work Contracts in Jowar Harvesting

<table>
<thead>
<tr>
<th>Traditional Varieties</th>
<th>Hybrid Varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1. Wage sum paid in jowar to a team of workers. Wages</td>
<td>H1. Wage sum paid in jowar to a team of workers. Wages</td>
</tr>
<tr>
<td>dependent on area harvested</td>
<td>dependent on area harvested</td>
</tr>
<tr>
<td>(Hotra, Dhanora Moghal, and Sasang)</td>
<td>(Sasang)</td>
</tr>
<tr>
<td>T2. Wage sum paid in jowar to a team of workers. Share</td>
<td>H2. Wage sum paid in jowar to a team of workers. Share</td>
</tr>
<tr>
<td>wage based on quantum of jowar harvested</td>
<td>wage based on quantum of jowar harvested</td>
</tr>
<tr>
<td>(Ganoja, Anchalwadi, Khed, Ghodasgaon, Talegaon Thakur)</td>
<td>(Ganoja, Anchalwadi, Khed, Ghodasgaon, Talegaon Thakur)</td>
</tr>
<tr>
<td>T3. Daily wage paid in cash to workers employed</td>
<td>H3. Daily wage paid in cash to workers employed</td>
</tr>
<tr>
<td>individually</td>
<td>individually</td>
</tr>
<tr>
<td>(Jarud and Pathrot)</td>
<td>(Jarud and Pathrot)</td>
</tr>
<tr>
<td></td>
<td>H4. Wage sum paid in jowar. Wage dependent on the</td>
</tr>
<tr>
<td></td>
<td>quantum of seed sown</td>
</tr>
<tr>
<td></td>
<td>(Hotra and Dhanora Moghal)</td>
</tr>
</tbody>
</table>

Note: The villages in which each kind of contract is to be found are given in brackets.

The wage be now determined as a share of the actual produce and not based on the area sown. In fact, two of these villages have had a history of village level struggles. However, that they were able to succeed had as much to do with the interests of the richer peasants as to their own ability to wrest this change. Hybrid jowar matures in October/November, nearly a couple of months earlier than traditional jowar. Rich peasants with private sources of irrigation could now sow a winter (rabi) crop of wheat immediately after the Kharif crop of hybrid jowar, which was
otherwise possible only if land was left fallow in the Kharif season. Time then was of crucial importance and there was a greater imperative to hasten completion of harvesting operations. Rather than continue with the dispute-ridden traditional harvest contract, richer peasants seeking a second crop agreed to the labourers' demands. What is interesting is that everywhere this switch has resulted in an increase in the wage received by each member of the harvesting team. So much so that, unless the yield falls well below the average this contract is always advantageous to the labourers. This has possibly arisen as much from a higher than expected yield of hybrid jowar as from the labourers' ability to successfully bargain for a higher share of the crop.

Table 7.14 which presents the earnings from jowar harvesting in one of the villages surveyed (where contracts T2 and H2 are in use) shows that while daily earnings in harvesting hybrid jowar are higher, the wage sum as a proportion of yield remains more or less the same in the new contract. The adoption of this new contract now covers both traditional and hybrid jowar. Under this system, earnings in harvesting traditional jowar are slightly less than before—however, traditional jowar now covers a very small proportion of jowar area.

On the other hand, how a different set of material conditions leads to a work form which actually results in lower wages is illustrated by the experience of labourers in the two 'backward' villages, Dhanora Moghal and Dhotra. Wheat is not cultivated in this tract, so the speeding up of work that was important in other villages and partly accounted for a switch to the produce sharing contract is not of any consideration here.

<table>
<thead>
<tr>
<th>Area-Based Contract (Traditional Jowar)</th>
<th>Share-Produced Contract (Traditional Jowar)</th>
<th>(Hybrid Jowar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield/acre (kgs)</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Man days worked/acre</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Wage sum (kgs of Jowar)</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Earnings/day (kgs of Jowar)</td>
<td>5.3</td>
<td>5</td>
</tr>
<tr>
<td>Cash equivalent of earnings (Rs)</td>
<td>6.50</td>
<td>6</td>
</tr>
<tr>
<td>Wage sum as a proportion of yield (%)</td>
<td>8</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Note: 1. In the area-based contract 4 kuros are paid as wages for every tiphan harvested. In the share-produce system, 13 pylees are usually paid for every khandi of jowar harvested (1 pylee = 2 kgs, 1 kuro = 16 kgs and 1 tiphan = 4 acres). These are average rates and can vary by 20% depending on the state of the crop. The wage sum given above is that received in harvesting 1 tiphan of jowar under each of the three contracts.

2. The retail price of jowar in the village was Rs. 1.20/kg in that season.

3. The area-based contract was not in use at the time of the survey. The terms are those which prevailed prior to its disappearance.

But employers seeking to lower the wage argued that as the stalks of hybrid jowar are shorter and thinner, the work involved would be less (when actually with the fields much more densely packed the extent of work is considerably more); wages were now determined by the amount of seed sown (H4), while the area-based contract for traditional jowar
continued (T1, H4). The switch in the work form though probably intended to disguise the lowering of wages is clearly much more open to manipulation, and the harvest wage in hybrid jowar is now always lower than that in traditional jowar. The bargaining power of labourers in Ihanora Moghal and Dhotra is poor. Agricultural productivity is low in these villages (Appendix 3); the practice of employing saldars is more prevalent and there is very little non-agricultural activity. All this must have made possible the lowering of harvest wages when hybrid jowar was introduced.

Finally, a conjunction of an entirely different set of factors has led to the adoption of yet another kind of contract in Pathrot and Jarud. Of all villages surveyed, only Pathrot and Jarud seemed to show signs of 'dynamism'. There seemed to be a continuous process of accumulation and reinvestment in agriculture. In these 'advanced' villages, cotton and jowar yields were the highest (Appendix 3), more hybrid cotton is grown here than elsewhere, a high water table has led to a substantial expansion of area irrigated from private wells which in turn has resulted in increasing multiple cropping as well as diversification into development of orange orchards etc. They were also the largest villages surveyed and there seemed to be a correspondingly higher degree of non-agricultural activity (mainly in services), and wages in both agriculture and non-agriculture were higher. It is in both these villages that jowar harvesting is done by casual labour employed individually by the day and wages paid in cash in all operations.
The transformation of work contracts in harvesting both hybrid and traditional jowar (T3 and H3) and the most visible signs of this process of further casualisation.

Contracts T3 and H3 are very different from all the other types. Firstly, individual workers and not a team are employed. Secondly, the job is split up into its 3 different components (cutting, binding and stacking of stalks). Thirdly, workers are employed only on a time-rate daily basis. Finally, their wages are paid in cash and not in kind. This transformation has to be seen in terms of the declining importance of jowar cultivation in Pathrot and Jarud. As rich peasants increasingly cultivate crops which have a greater market ability and higher profitability, jowar cultivation has fallen. Employers introduced this new work form in harvesting jowar over the opposition of the labourers who prefer a produce-sharing or area-based contract as well as wage payment in kind. With jowar area kept to a minimum, the imperative to speed up jowar harvesting that existed in the (H2 and T2) villages is not there and therefore any form of piece-work unnecessary. And cultivators prefer to pay wages in cash rather than grow that much more jowar to pay kind wages.

Cash or Kind Wages

In our discussion so far we have seen that other than in harvesting of jowar, wages in all other operations are paid for in cash. However, harvesting of other food crops grown in Amravati
(tur, wheat and chillis) are all paid in kind.

It would appear that the only respect in which the mode of wage payment has changed since the early 20th century is in the payment for cotton picking, where at one time all pickings were paid for in kind (cotton). This gradually gave way to payment in kind for only the 'middle' pickings. Even this was beginning to give way to cash payment. The ostensible reason for this switch was to prevent 'theft' of cotton by the women labourers. An equally plausible reason is that the high price of cotton made payment in cash preferable for the cultivators.

The predominance of cash wages is undoubtedly the result of a history of market involvement with the cash nexus penetrating Amravati's agrarian economy. Correlatively the importance of cotton in cultivated area means relatively less land is sown with food crops. Finally, it is to the employers' advantage to pay cash wages for ploughing, sowing and weeding, since these operations are carried out between June and October when jowar prices reach their annual peak as the availability from the previous year's harvest dwindles and the current year's crop would mature only in November.

One can, however, discern two important reasons for the general preference for paying jowar harvest wages in kind. Jowar is sold on the market but it is a localised and not a national market. The absence of a larger market probably makes it less attractive (compared to cotton) for the cultivator to retain all his produce for sale on the market. Moreover, since jowar prices fall during the harvest season,
it is to the cultivators' advantage to pay harvest wages in kind. 35/

We could also venture to suggest that as much as there may be 'economic' reasons for paying harvest wages in kind, remnants of custom and tradition that labourers' food requirements should be met at least partly by wage payment in kind do still play a part. This is particularly evident in payment of kind wages in harvesting of all food crops (jowar, wheat, tur and chillis) grown in the region.

Male or Female Labour

In Amravati, as elsewhere in India, the backbreaking and crucial agricultural tasks are done by women while the ostensibly more onerous tasks like ploughing are done by men. In fact, weeding and picking, the two most important operations in cotton cultivation, which are also the most time consuming, are done almost entirely by women. 36/

The F/S surveys showed that in all crop cultivation, hours of work done by female casual labour constituted more than 60 per cent of total casual labour hours worked. In terms of total hours of work the role of men is a little more than that of women, largely due to the low level of involvement of female family labour (Table 7.15).

But there are as many female as male agricultural labourers in Amravati, working more hours than the males at lower wages.

With a woman's wage being lower than that of a man, it is not surprising that history and tradition identify the operations performed
Table 7.15: Percentage Distribution Hours of Farm Work done
by Men and Women in Amravati (1956-57)

<table>
<thead>
<tr>
<th>Source</th>
<th>Men (% of total)</th>
<th>Women (% of total)</th>
<th>Men+Women (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Family Labour</td>
<td>35</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>2. Farm Servants</td>
<td>24</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>3. Casual Labour</td>
<td>39</td>
<td>85</td>
<td>60</td>
</tr>
<tr>
<td>4. Exchange or labour in gratis</td>
<td>2</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: 1. * indicates negligible

by women as essentially 'women's tasks'. As one colonial administrator put it, "the preference for women cotton pickers today is not so much a superstition as an economic hankering for cheap labour".37/

Conclusions

It has now been more than two decades since the much vaunted 'new' technology was introduced in India. While this technology has contributed to an increase in agricultural output, its potential for generating employment remains a matter of controversy. What is disturbing is that because of the crucial importance of package of inputs (seed, water, fertilizer), the very nature of this technology has limited its full impact both to only certain classes and certain
regions, in the main to those which have a developed irrigation network. Rainfed areas have been bypassed in the course of this 'revolution' and agricultural output as well as employment have stagnated. While resources have poured into the promotion and adoption of the 'new' technology, there has been little success in developing a technology appropriate to the agro-climatic conditions of rain-fed regions which could contribute to an increase in production and employment.

The impact of the 'new' technology on the output, employment, wages and relations of employment has been the subject of close scrutiny but the conditions in rainfed areas have largely gone unnoticed. It is the agricultural wage labourer of rain-fed areas who has borne the brunt of stagnancy. The stagnancy in agricultural output and employment, combined with an increasing population pressure on land has meant a declining trend in per capita agricultural employment in agriculture and, in all probability, in the real wage as well. The inability of the non-agricultural sectors to provide sufficient employment opportunities has only exacerbated this pressure on land. Amravati's experience since Independence is symptomatic of these conditions.

In addition, the history of commercialisation in Amravati has had its own impact on the forms of employment. It is generally believed that forms of employment in 'backward' areas continue to exhibit 'non-market' features. This is, however, not the case in Amravati. Well before the stagnancy in Amravati's agriculture set in, forms of
employment were increasingly commercial in character and gradually bereft of features of patronage of extra-economic coercion. This process has only been carried further with the stagnancy in agriculture. Cultivators faced with stagnant yields have become increasingly conscious of costs and incomes. They have sought to trim the wage bill in various ways. They have reduced the extent of permanent farm labour and where permanent farm labour is necessary, they have made the form of employment purely contractual without any customary rights and obligations. They employ casual labour under contracts designed to extract maximum work with minimum supervision. The market orientation of contracts which began decades ago has now become more indispensable for the employers of labour in Amravati.

This is not to suggest that workers have absolutely no say over the terms and conditions of employment. The differences in the work contracts in harvesting jowar and cotton picking and between hybrid and traditional varieties, among villages and over time indicate a continuous attempt on the part of both landowners and labourers to control the minutest details of the organisation of work. But workers' struggles are localised not only at the village level but also at the level of individual tasks and particular work forms. And the overall impact on labourers' income and work remains extremely small. The highly segmented nature of the labour market according to age, sex and task allows employers to retain their dominant control while acceding, at times, to the demands of a particular section of the wage labourer population.
Chapter VII: Notes

1. 'Berar' was the colonial name for Varhad. In this Chapter we use the original name.


5. Though rainfall averages 785 mm in Amravati District (95% of it falling between June and October), it is highly variable, varying from a low of 550 mm to a high of more than 1400 mm. Based on 39 years of weather information it is estimated that with a mean of 136 mm in June, one year in five could be a year of less than 102 mm and as little as 60 mm. In July, though the mean is 252 mm, a low of 122 mm could be expected once every five years. In this variability, the productivity of cotton cultivation in Amravati has been found to be below average when rainfall is either above or below normal by as little as 20 per cent. Appraisal of Integrated Cotton Development Project (World Bank, Washington, December 1975, mimeographed) Annex 2, pp.5-6.


8. loc. cit. See also Buldana District Gazetteer, op.cit. p.243.


11. loc. cit.

12. ibid, p.246.

13. loc. cit.


16. Farm Management Studies (1955/56) op.cit. Tables A3.15.2A and B.


19. The 1881 Census also describes a work organisation similar to that of contained in the District Gazetteers. Census of Berar (1881), pp.233-234.


22. loc. cit.

23. (i) Data for the sub period 1869/70 to 1880/81 is from the 1881 Census which does not indicate the source of information.

(ii) Prices and Wages in India is the source of information for the years between 1892 and 1926. The reliability of agricultural wage data therein is questioned by the compilers themselves, for "what we're supposed to be average wages of agricultural labourers
in a district usually turned out to be only cash wages for
labourers employed in towns or their neighbourhood which...
(were) in no way typical of the rates prevailing throughout
the district". (Prices and Wages in India, Calcutta, 1909, p.217).

(iii) Data for 1957-1980 are from Agricultural Wages in India
based on information in one (unchanging) centre in Amravati
District.


26. J. Martinez-Alier, Labourers and Landowners in Southern Spain

27. ibid.p.248.

28. In some operations, piece rating can affect quality as shown
in the harvesting of beet (ibid,p.248). But during our
field survey of Amravati we came across no such complaints from
landowners.

29. This preference for piece-rates in Amravati contrasts with a
more discriminating view of labourers in Chingelput District
in Tamil Nadu. See Mihir Shah,"Capitalist Development and the
Transformation of Agrarian Relations in Chingleput District,
1780-1983" (unpublished Ph.D thesis submitted to the Jawaharlal
Nehru University, New Delhi, 1984), pp.289-290.


31. Interestingly, labourers in Pathrot have turned this disadvantageous
situation in jowar to their favour in cotton picking. They have
done this by forcing employers to adopt time-rates in cotton picking
also, which turns out to be to their advantage: as daily wage-rates
in Pathrot are very high; and by slowing down work labourers are able
to earn an imputed piece-rate 3-4 times higher than in other villages.

32. Akola District Gazetteer, op.cit. pp.203-204, Amravati District
33. "The system of payment in cash is of recent extension and is especially intended to facilitate the detection of people who steal cotton from the fields; a labourer with stolen cotton in his house can no longer pretend that it was received in payment for field-work" *Akola District Gazetteer, op.cit.*, pp.204.


35. It is, however, only in the rare instances of villages like Pathrot and Jamud where jowar acreage is low that payments are made in cash.


CHAPTER VIII

Conclusions

This thesis began as an attempt to provide a comprehensive understanding of the observed regional variations in the incidence of agricultural labourers in the work force. Our conclusion, however, is essentially 'negative' in the sense that without regional studies any attempt at universal explanations will remain limited. There can be little dispute about the many processes which underlie the incidence of agricultural labour in any region. But more important than the multitude of processes which underlie the incidence of agricultural labour is the diversity of effects and influences. We have tried to argue that many of the relevant processes (the dynamics of land inequality, population growth, changes in technique and cropping pattern, the development of the non-agricultural sector etc.) need not lead to a higher or lower incidence but instead bring forth 'adjustments' in the degree of under-employment and in the wage rate. We have also argued that the relative importance of any one process depends very much on the presence or absence of other processes. Thus, the effects of a worsening land inequality on the relative magnitude of the agricultural labourer population depends, for instance, on the corresponding growth of employment in the non-agricultural sector and the opportunities
to migrate. Again, population growth, *ceteras paribus*, would lead to a higher incidence; but this depends very much on what happens at the same time to land productivity and the non-agricultural sector. If productivity on small holdings were to rise rapidly, the rise in incidence via a growth in the landed labourer households could well be held back; the same would be the case if the non-agricultural sector were to offer better employment and incomes to members of these households.

Another important difficulty in offering a simple understanding for these spatial variations lies in the heterogenous historical 'origins' of this class. The incidence of agricultural labourers in India is presently one of the highest in the world but it is now quite clear that there were agricultural labourers well before the advent of colonialism and prior to any tendency towards capitalist development. In that sense their relative magnitude can be adduced neither solely to the many detrimental effects of colonialism nor to the creation of a free wage labour proletariat. Similarly, while a growing population pressure certainly has had a lot to do with the rising incidence in recent decades, the presence of landless labourers when land was not scarce indicates that pressure on land is in itself not the most important 'explanatory' factor.

Traditional caste formulated codes on access to land and 'prescribed' occupations, the degree of detribalisation and transformation of tribals to agricultural labourers, the multifaceted
influences of colonial land revenue policies and commercialisation of agriculture, the destruction of traditional industries during colonial rule and the gradual breakdown of the jajmani system, the effects of growing population pressure on small and poor peasant cultivators, Tenancy Reform of the 1950s, the effects of an unequal access to the 'new' technology etc. constitute a truly heterogenous set of 'origins'.

It is not our suggestion that an understanding of the incidence of agricultural labour must go back to the beginnings of settled agriculture in each and every region. A recognition of historical antecedents is necessary and some 'bench mark' which separates one phase from another is important. This is in a sense what we attempted in our study of labourers in Berar. There were agricultural labourers in Berar prior to colonial annexation in 1853. But the 'cotton boom' and the conditions of agrarian expansion in the late 19th century are crucial phenomena for understanding the contemporary very high incidence in Berar.

A recognition of time is certainly implicit in the modelling of formal econometric exercises which seek to 'explain' regional variations. But for our concerns the assumption of conditions in different regions as representing different points on the same historical trajectory is somewhat questionable. If the relevant processes and the manner of their influence on the incidence of agricultural labourers in each region are truly as diverse as we have suggested, then such models are clearly of limited value. The
set of 'correlated' characteristics is in any case known - land
inequality, population pressure, commercialisation and the size
of the non-agricultural sector being the more important of such
variables. But if we are to go beyond that what we do need are
regional studies representative of the diversity of conditions in
rural India.

Such regional studies would in the first place bring out
the many different conditions underlying the spatial variations
in the incidence of agricultural labour. But the resulting complexity
of conditions should facilitate rather than hinder abstraction. One
can visualise construction of a typology of conditions each of which
has led to a higher or lower incidence of agricultural labour. Such
a typology could comprise both agro-climatic (rainfall, soil and crop)
and socio-economic (the dynamics of land inequality and population
growth) variables, wherein some of the processes we have discussed
(growth of the non-agricultural sector and migration) are residual
influences. But at this stage this is merely speculation. The point
is rather that the case for regional studies is not a case for showing
that conditions in each region are different; theoretical abstractions
are possible but to be meaningful they have to be grounded in the
regional diversity of conditions that obtain in rural India.

Our study of Berar highlighted the need to go beyond relating
the incidence of agricultural labour to certain obvious 'explanatory'
factors. Land inequality in present day Berar is less than in the country as a whole and the land-man ratio far more favourable. But this area of a very high incidence is also one with a very high degree of commercialisation. It is therefore tempting to adduce this high incidence to the consequences of an integration with the market, with the well known results of large scale transfer of land from the small peasant to rich peasant/money lender-cultivator. But we have seen that while the rise in incidence in Berar was in a larger sense certainly related to the process of market integration, it was by no means only or for that matter largely due to dispossession of sections of the landowning peasantry. Such dispossession did occur but that was only one among many equally if not more important causes.

In the course of our discussion of the incidence of agricultural labourers in Berar, many features of the region's agrarian economy seemed 'unusual'. As early as the late 19th century, cultivation was organised on large holdings, supervisory cultivation of hired labour rather than tenant cultivation was the norm, the agricultural labour force was largely causalised (though segmented), wages were paid mainly in cash and, most important, relations between landowners and labourers reflected more the dictates of market production rather than any norms of 'paternalism'. In short, Berar exhibited few of the characteristic features of so-called 'semi-feudal' agriculture which are often held responsible for retarding the process of accumulation and growth.
The agrarian economy of Berar certainly did grow until the 1920s but this was extensive rather than intensive growth and depended entirely on sustained world demand for its cotton. There were few signs of reinvestment of the surpluses generated during these years - either in agriculture itself or in the non-agricultural sector. So once the extensive margin was reached and then when the demand for cotton subsided, agriculture in Berar stagnated and what was at one point considered a 'prosperous' region is now one of the poorest in the country. Berar may be 'unusual' but the region's experience suggests the need to be more careful before making any generalisations about 'semi-feudal' relations of production and agricultural stagnation.

Before ending we need to touch on three aspects of this thesis. The first is an apparent excessive reliance on 'numbers', the second on the rather cursory discussion of forms of employment of agricultural labourers and third on the disregard of the distinction between processes underlying the participation of women workers as agricultural labourers and those of male agricultural labourers.

It is a trite point that the concern should be not so much with 'numbers' as with the processes which underlie these 'numbers'. But if we have spent a considerable amount of time on the district wise incidence of male agricultural labourers between 1881 and 1981, this has been for three reasons. In the first place this exercise has brought out the hitherto unnoticed aspect of a century long stability in the spatial variations. Second, state level aggregates mask a
much sharper degree of variation existing at the district level. (No doubt, the district is an administrative unit and not a region homogenous with respect to either agro-climatic or socio-economic conditions; but the considerable size of most states hides a much larger underlying heterogeneity). Third and most important, our analysis of the incidence of agricultural labour in colonial and post-Independence India has revealed, on the one hand, the need to be extremely careful before making any inferences (viz. on the growth of agricultural labour between 1881 and 1931) and, on the other, the ability to arrive at plausible conclusions with a careful use of the defect ridden Census data (viz. on the trends since 1951).

In all our discussion of agricultural labour, the examination of forms of employment has been admittedly scanty. To a limited extent we have tried to cover this important issue in our study of labour in Berar. We showed that in many ways forms of employment were linked to the larger agrarian conditions. Berar may presently be 'backward' in terms of productivity and growth, but in no way are the forms of employment 'backward'. As we have noted, it has an extremely casualised though segmented labour market with a very detailed organisation of work and mode of wage payment. We have tried to argue that as conditions changed from expansion to stagnation, the squeeze on incomes of landowners led them to attempt changes down to the minutest detail in the forms of employment of labour. But though Berar has had no history of wage struggles, its agricultural
labourers have tried to resist changes in the organisation of work and tried to hold back (albeit unsuccessfully) the downward pressure on the real wage rate.

In our discussion of the trends in incidence we have dealt exclusively with male labourers. This has largely been dictated by the Census concepts of work which have been ill suited to capture the twin involvement of women in domestic production and in work outside the home. These defects of the occupational statistics only compound the other errors of the Censuses. Such problems are not intractable but it has been beyond the scope of the present study to cover both male and female labourers in the same detailed manner. A more important aspect of our disregard of female labour is our assumption that the processes underlying participation of male workers as agricultural labourers are the same as those underlying women as agricultural labourers. Insofar as the processes affect households rather than individuals, there is a great deal of similarity in the effect on men and women. But once we take cognizance of the complexity of women's work, the need to make a distinction between women and male workers becomes obvious.