CHAPTER V
"An increase in employment is an urgent need in itself. It gives more people at least a minimum income it satisfies the human need for useful & creative activity and it provides more people with the opportunity for acquiring skills and the habit of work."

I.L.O. Report

"Employment Objectives in Economic Development."
It is an obvious fact that the most intractable and most difficult of the problems that India faces is unemployment and underemployment. To quote Prof. Mahalanobis, "unemployment and underemployment constitute the greatest social problem in the country at present." This is so because the record to date of employment creation in India indicates a growing backlog of unemployment year after year since independence under the planned economic development of economy. In India like many other underdeveloped countries, unemployment is an urban phenomenon whereas in the rural areas the problem is one of underemployment rather than unemployment, though it is difficult to make distinction between them sharply.

It is difficult to measure in absolute or even relative terms the volume of unemployment and underemployment in India. The estimate would depend very much on how the terms are defined and the definitions are used to measure unemployment and underemployment. Quantitatively the extent of underemployment will vary according to the concepts used. The difficulty of measuring the phenomenon is partly due to the fact that the distinction between unemployment and underemployment is not always sharp in rural areas and it is so much mixed up with that of unemployment that it is difficult to separate them, "while the serious nature of

The problem of underemployment has been widely recognised. There is a lack of systematic and accurate estimates of the extent of underemployment or the amount of surplus labour......, owing partly perhaps to the difficulties in the way of statistical measurement.

**Indian Approach and Experience:**

In relation to an underdeveloped economy, statistics of employment and unemployment present only a partial picture of the employment situation unless they are supplemented by data on underemployment. The surveys of the phenomena conducted and the concepts and definitions used in these surveys must be related to the conditions prevalent in the country concerned. In India, Survey on labour force, employment and unemployment have been conducted during the last several years by the National Sample Survey Organisation and the Indian Statistical Institute in cooperation with the Central Statistical Organisation. Surveys have also been conducted by the various State Governments research institutions and individuals. There has been substantial difference in the concepts, definitions used and methods of approach adopted in these surveys, partly for want of coordination and standardisation and partly with the deliberate intention of scientific experimentation. The Central Statistical Organisation has brought out in June, 1961 a monograph on Standardise for Surveys on Labour Force,

employment and unemployment prepared in the light of
eexperience gained through the NSS over the last several
years - started from pilot studies and surveys of limited
geographical scope to the first large scale survey on
employment and unemployment for the country as a whole by
the NSS in May to July 1955 till this monograph. The
standards deal more or less adequately with problems of
measurement of labour force, employment and unemployment
but only touch some of the problems relating to the
measurement of underemployment.

At this stage of development in India, it is more
meaningful to think of underemployment in terms of the
willingness of an individual to accept additional work
rather than on the basis of some definite "Norm" of work
to be put in by him, as in organised employment". Statistics
about underemployment depend very much on how the term is
definied. At the present stage of development, it is difficult
to determine the volume of underemployment with reference to
"Norms of hours per day to be worked by individuals or
other similar criteria. It is more meaningful to judge the
amount of underemployment by the extent of additional work
an individual may be willing to take up."¹ In India, a large
number of employed population in both urban and rural sectors
work only very few hours during a week. All these people
are not underemployed because some of them are not available
and desirous for additional work even though work is available.

¹ "Third Five Year Plan", Government of India, Planning
Commission, 1961, p.156.
for them. The criteria of availability for additional work distinguishes the employed persons into fully employed or underemployed. If a person works below a certain normal number of hours and reports as available for work, he may be treated as underemployed according to the norm adopted in India. But still how the fixation of norms for full employment and underemployment and the validity of time worked as a sufficient criteria are some of the most difficult aspects of the problem of measurement of underemployment.

In the surveys in India, according to 9th and 10th rounds of NSS, the concept of the unemployed was limited to those who were seeking work. In the 11th, 12th and 13th rounds of NSS, the unemployed are defined as persons without any gainful employment on the reference day or week who are either seeking, or (if not seeking) at least available for work on the reference day or on all the seven days of the reference week.

Distinction is made in the standards, issued by the Central Statistical Organisation between urban and rural sectors in defining employment. The terms and definitions used for urban and rural sectors are difficult. In the rural context, the economically active population consists of those "working" and those "available for work".
For urban sector the terms employed and unemployed, constitute labour force are still meaningful, useful and quite relevant. The persons, not coming in the above classification, may be classified "not in the labour force" and "economically in active" for urban and rural sectors respectively.

The Table No. 2.8 gives the estimates of unemployment in India as revealed by the various rounds of the National Sample Survey.

In India, the National Sample Survey has been collecting information on underemployment since the seventh round, though it has attempted to collect some data on visible underemployment in its 4th, 5th and 6th rounds also. In the 7th round information regarding underemployment was recorded in a quite different manner and a different method was adopted which is somewhat subjective measurement of underemployment, namely the intensity of employment during the reference month. In this connexion, six different levels of intensity ranging from full intensity to nil intensity were used; the intensity has been analysed in conjunction with occupation and with reasons for having less than full work. The Table No. 2.9 indicates the results of the 7th round according to different levels of intensity. It was found that as against an estimated 1 percent of the economically active persons reported as unemployed about 29.38
Table No. 2.3

The table showing the estimates of unemployment in India as revealed by the various rounds of National Sample Survey.

<table>
<thead>
<tr>
<th>NSS. Round</th>
<th>Reference period</th>
<th>Criterion</th>
<th>Labour force in %</th>
<th>Employed in %</th>
<th>Unemployed &amp; % of population</th>
<th>Unemployed as percent of labour force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth</td>
<td>(April 52 - Sept. 52)</td>
<td>Usual</td>
<td>46.79</td>
<td>46.74</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td>(May 53 - March 53)</td>
<td>Priority</td>
<td>46.22</td>
<td>45.72</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td>(Oct. 53 - March 54)</td>
<td>Priority</td>
<td>45.43</td>
<td>45.27</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Ninth</td>
<td>(May 55 - Nov. 55)</td>
<td>Year</td>
<td>43.50</td>
<td>43.21</td>
<td>0.29</td>
<td>0.7</td>
</tr>
<tr>
<td>Tenth</td>
<td>(Dec. 55 - May 56)</td>
<td>Day</td>
<td>40.19</td>
<td>39.32</td>
<td>0.37</td>
<td>2.2</td>
</tr>
<tr>
<td>11th/12th</td>
<td>(Aug. 56 - Aug. 57)</td>
<td>Day</td>
<td>Current</td>
<td>33.47</td>
<td>37.03</td>
<td>1.41</td>
</tr>
<tr>
<td>14th</td>
<td>(July 53 - July 59)</td>
<td>Week</td>
<td>Current</td>
<td>43.05</td>
<td>42.31</td>
<td>1.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Usual</td>
<td>46.03</td>
<td>45.33</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Table No. 2.9
Percentage Distribution of Gainfully employed Population by Intensity of Employment
7th Round of NSS
(October 1953 - March 1954).

<table>
<thead>
<tr>
<th>No. Work</th>
<th>Less than quarter</th>
<th>Quarter</th>
<th>Half</th>
<th>Three Quarters</th>
<th>Full</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>4.98</td>
<td>4.07</td>
<td>4.33</td>
<td>10.69</td>
<td>7.03</td>
<td>68.35</td>
</tr>
<tr>
<td>Urban</td>
<td>2.04</td>
<td>2.12</td>
<td>2.67</td>
<td>8.77</td>
<td>6.37</td>
<td>78.03</td>
</tr>
</tbody>
</table>
percent worked with less than full intensity and about 12.73 percent worked with quarter intensity or less on the basis of these results. It was estimated that 1.46 million persons (0.39 percent of the total population) in India reported as unemployed during this period. Of these 47.72 million persons worked with less than full intensity, that is, they were not working full time. An analysis of the reasons for underemployment of those reporting less than full intensity of employment showed that 48.7 and 52.6 percent of underemployment are due to economic reasons: lack of demand, lack of materials and equipments and slack and off-seasons in the rural and urban sectors respectively. This analysis by reasons suggested that roughly half the labour time not utilised at full intensity of employment belonged to real underemployment. On the basis of these results, the following conclusion was drawn. "To provide anything near full employment to the nearly underemployed labour force, therefore, at least eleven million equivalent of additional wholetime jobs will be necessary on the assumption that additional employment with half intensity will convert the average severely underemployed to full employed."¹

A more impressive effort was made in the ninth round (May-Nov. 1955) of the National Sample Survey when a separate schedule on employment and unemployment was canvassed and different approaches were tried out. In this

¹ NSS. No.14: Report On Some Characteristics of The Economically Active Population," The Cabinet Secretariat, Govt. of India, Chapter IX, "Intensity of Employment & Income", p.73.
round labour-time disposition approach was attempted for the first time to measure rural underemployment on all India scale. For every gainfully employed in the sample, labour time utilization during the reference week was recorded. Each gainfully employed was also questioned about his availability for additional work. Persons were classified as employed, unemployed or outside labourforce on the basis of the usual status and every persons classified as employed was asked whether he or she was employed throughout the reference year and if not, the months of the year when the person was unemployed were noted. It was found that 13 to 14 percent of the gainfully employed persons in rural areas and 6 to 7 percent in urban areas had no work in one or more months of the year. It was also found that on an average 3 percent of the employed persons in rural areas and 3 1/2 percent in urban areas had no work each month.

In this survey, those among the gainfully employed who involuntarily work for less hours than an arbitrarily fixed hours and report themselves as available for extra hours have been treated underemployed. The underemployed were classified into two categories. Severely underemployed and moderately underemployed. Persons working for 28 hours or less a week or on an average 4 hours or less a day and available for extra work were defined as severely underemployed.
Those working for 29-56 hours a week or more than 4 hours and upto 8 hours a day on an average and available for extra work were termed moderately underemployed. The report of the ninth round assumed that 43-56 hours in a week or 6-8 hours in a day is the general norm of full employment in India. The survey results reveal that 8.98 percent and 5.51 percent of the gainfully employed persons in rural areas were severely and moderately underemployed respectively. 14.81 percent of gainfully employed persons are underemployment in the sense that they work less than 8 hours a day and are available for additional work. "Slightly more than half (53.70 percent) of the gainfully employed persons in rural areas work for 43 hours or more in a week (32.66 percent work for 43-56 hours in a week or, an average 6-8 hours a day) or 6 hours or more in a day. On the other side 11.87 percent of gainfully employed persons in rural areas have been recorded as doing no work and 5.61 percent work only for a few hours in a week. 17.33 percent work for 29-42 hours in a week or on an average 4-6 hours a day and 11.49 percent work for 15-28 hours in a week or on average 2-3 hours a day." 2

If work for more than 42 hours a week is taken as full time employment, not more than 54 percent could be considered working full time. The 9th round survey reveals


that less than full time employment need not necessarily mean underemployment. According to the report of this survey a little less than ½ of the gainfully employed reporting nil intensity of work were available for additional work. Similarly among those reporting work for 1 to 14 hours a week only 40 to 43 percent were available for extra work. Thus while 46 percent of the gainfully employed reported either no work or an intensity of less than 43 hours a week, only 14 percent, with these intensities of employment, reported their availability for additional work. Another 3 percent of the gainfully employed with a higher intensity of employment also expressed their willingness to undertake additional work. If the 9th round data are interpreted on the basis of "availability for additional work" criteria alone and persons available for additional work for less than 23 hours a week and more than 28 hours a week as severely and moderately underemployed respectively, the severely and moderately underemployed would appear to constitute 7.5 and 10 percent respectively of all the gainfully employed.

From the 9th round onwards information has also been collected on the number of days and hours worked during the reference week. Persons were also asked as to whether they were available for additional work. In the subsequent rounds the usual status a preace of labour force classification was given up in favour of the current status approach and
along with it, the seasonal unemployment gets absorbed in the estimate of current unemployment. Collection of data on the number of days and hours worked during the week continued in the subsequent rounds as a measure of current underemployment while data on current unemployment which replaced the estimates based on usual status took care of seasonal unemployment as surveys tended to be conducted in annual rounds covering all seasons. It is not necessary to set any limits either in terms of the hours worked or in terms of additional hours available at the stage of collecting data. The limits to be set can best be decided at the stage of analysis keeping the specific requirements in view.

In the 10th round gainfully employed persons were treated as underemployed or fully employed on the basis of weekly hours worked and availability for additional work. The severely underemployed were persons working 28 hours or less during the week or on an average 4 hours or less per day and reporting as available for additional work. The moderately underemployed were those working 29 to 42 hours per week and reporting available for extra work. The survey results reveal that 6.70 percent of the gainfully employed or 2.63 percent of the total rural population were severely underemployed in rural areas and 2.20 percent of

the employed or 0.87 percent of the total rural population were moderately underemployed.

In the 11th and 12th rounds (August 56 - August 57) an attempt was also made, by investigating the number of hours actually worked to ascertain the extent of underemployment prevailing in India. The method adopted involved two steps: to find first the distribution of employed persons according to the number of hours at work in the reference week; and second the proportion of persons in each category who reported that they were available for additional work. The same classification was used as for the 10th round. Persons reporting themselves available for additional work and working less than 28 hours during the week were treated as severely underemployed and those working between 29 and 42 hours a week as moderately underemployed. The survey results show that 7.05 percent and 5.10 percent of the gainfully employed as severely and moderately underemployed respectively in rural areas.

In this survey, the intensity of employment was examined on the basis of hours at work and the information regarding availability for additional work and also the number of days employed and unemployed during the week. It was found that on an average every gainfully employed person was employed for 6.75 days during a week in rural areas and
0.12 day during a week in the rural areas was idle due to want of work. If the average number of days unemployed may be taken as a measure of underemployment, was found that about 1.71 percent of the employed were underemployed according to this approach. 1

In the 13th round the same classification and definitions of severely and moderately unemployment were used as in the preceding rounds but a new category of "nominally underemployment" was introduced. A person was classified in this category if he worked in the "unorganised" sector, i.e. self-employed, family workers or wage earners in a very small establishment, worked for less than 56 hours per week and reported available for extra work.

In addition in the 13th and 14th rounds, information on availability for additional work was collected only for persons working less than 3 hours in a day in the organised sectors and less than 10 hours a day in unorganised sectors. The state of current underemployment as revealed by the classification of employed persons by hours worked per week and the percentage thereof reporting availability for additional work for the year 1958-59 to 1958-59 is given below:

### Table No. 3.0

**Percentage Distribution of Gainfully Employed Persons by Hours at Work.**

<table>
<thead>
<tr>
<th>NSS Round</th>
<th>Weekly Hours at Work</th>
<th>Employed persons available for additional work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upto 23</td>
<td>Upto 28-42</td>
</tr>
<tr>
<td>9th and 10th rounds</td>
<td>29.36</td>
<td>17.72</td>
</tr>
<tr>
<td>11th and 12th rounds</td>
<td>28.71</td>
<td>13.37</td>
</tr>
<tr>
<td>13th round</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14th round</td>
<td>24.07</td>
<td>20.11</td>
</tr>
<tr>
<td>9th and 10th rounds</td>
<td>28.12</td>
<td>17.26</td>
</tr>
<tr>
<td>11th and 12th rounds</td>
<td>15.91</td>
<td>13.32</td>
</tr>
<tr>
<td>13th round</td>
<td>13.53</td>
<td>11.19</td>
</tr>
<tr>
<td>14th round</td>
<td>15.35</td>
<td>10.33</td>
</tr>
</tbody>
</table>

**Source:** Reports on Different rounds of NSS.
The international standards in regard to measurement of visible underemployment imply comparison of the time worked by the individual with the corresponding norms of work. In the organised sectors employment is mostly regular and full-time and hours of work are also standardised in practice. A person who attends work on a given day usually works full-time during the day. Underemployment can as well be measured in these cases in terms of days not worked. The NSS has been regarding work of 8 hours a day in the organised sectors and 10 hours a day in the unorganised sectors as normal and refraining from asking persons who already work 'normal' hours about extra hours available for work. On the basis of NSS data, the Indian Statistical Institute have been regarding persons who worked 28 hours or less and available for additional work as "severely underemployed" those worked 29 to 42 hours and available for additional work as "moderately underemployed" and those worked more than 42 hours and available for additional work as "nominally underemployed".

In estimating current underemployment for the Third Five Year Plan, the Planning Commission have assumed persons working 42 hours or less and available for additional work as underemployed. The currently underemployed persons for the Third Five Year Plan have been calculated 10.3 percent, of employed population and 12.1 percent of the employed population according to 9th and 10th rounds and 11th and 12th rounds in rural areas.
respectively. One estimate puts the figure of underemployment in India 22.6 million at the beginning of the Third Plan on the basis of information collected in 11th and 12th rounds of NSS, of which 20.1 million or 33.1 percent live in rural areas and the rest 2.7 million live in urban areas (11.9 percent). According to this estimate the moderately and severely underemployed constitute 4.9 percent and 16.3 million or 6.6% of the employed persons in India. The proportion of severely underemployed constitute 7.0% in rural areas and 4.5 percent in urban areas and moderately underemployed 5.1% in rural areas and 3.8% in urban areas. Although it is very difficult to arrive at an average norm for full time of work in terms of average working hours for all occupations per day or per week. On the basis of a norm, persons working 43 hours or more and expressing willingness to work more may be regarded as invisible underemployed and the rest as visible underemployed, the estimates were put at 4.83 million or 21.1 percent and 17.98 million or 78.8 percent respectively in India as a whole. The estimates of visible and invisible underemployment by this yardstick were arrived at 16.9 million (or 79% of the total underemployed) and 20.9% and 2.0 million (74.1% of underemployed) and 25.9 percent respectively in rural and urban areas. The same author puts the figure of 102.53 lakhs - 83.10 lakhs in rural areas and

19.43 million in urban areas as the estimate of total number of persons unemployed at the start of the Third Five Year Plan on the basis of the results of NSS 11th-12th round, conducted during August 1956 - August 1957.¹

Prof. Mahalanobis, on the basis of the figure 47.72 million worked for less than full intensity revealed by the 7th round, arrived at 23 million figure as real underemployment in India. On the estimated population of 1961 as 430.8 million and applying the results of 10th round (severely and moderately underemployed works out 8.96 million and 2.96 million in rural areas and 1.37 million and .82 million for urban areas respectively; the total comes to be 14.11 million), the Draft Outline of the Third Five Year Plan had estimated 15 million as underemployed in India. In the light of detailed studies of the NSS Reports the figure of 15 million as underemployed at the beginning of the Third Plan appears as under estimate of the volume of this phenomenon in India. The position of severely and moderately underemployed in rural and urban areas in 1961 as estimated on the basis of the results of different rounds is summarized below. These figures were arrived at on the basis of total population 430.8 million and the estimated percentage for urban population to the total population was taken as 20.9. The norms for categorizing severely and moderately underemployed were taken the same for all the round as were used in 11th and 12th rounds of NSS.

¹ Y.S. Yegnaraman: "Estimates of Unemployment at the beginning of the Third Plan" AIEC Economic Review, April 7th, 1962, p.22.
The Table No. 3.1 shows three sets of figures. According to the 9th round, the underemployed works out 23.97 million. 14.12 million were underemployed according to the 10th round. Since the 9th round was conducted for the reference period of May-Nov. 1955 and the 10th round in Dec. 1955 to May 1956, a combination of these two rounds using the same norm an average figure of 19 million could be worked out. The 11th and 12th rounds which represent a full year show a figure of 18 million. So the figure of 15 million represent the lower limit. The underemployment varies from 15 to 18 million.

Labour Time Disposition Approach:

Apart from the hours of work approach, another approach that has been in use is an analysis of labour-time disposition for providing a more comprehensive picture of the employment pattern. In this approach the labour time, i.e., an analysis of the number of days available to each working person in a given reference period is attempted to be broken up according as the person was (a) at work (b) had work but abstained (c) had no work or (d) was not available for work. The data are averaged over the weeks through the entire round. The following table gives the data accordingly as revealed by the 14th round 1958-59.
Table No. 3.1

<table>
<thead>
<tr>
<th>Round</th>
<th>Rural</th>
<th></th>
<th>Total</th>
<th></th>
<th>Urban</th>
<th></th>
<th>Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sev.</td>
<td>Moderately</td>
<td></td>
<td></td>
<td>Sev.</td>
<td>Moderately</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>under-</td>
<td>under-</td>
<td></td>
<td></td>
<td>under-</td>
<td>under-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>employed.</td>
<td>employed.</td>
<td></td>
<td></td>
<td>employed.</td>
<td>employed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th round</td>
<td>11.33</td>
<td>5.33</td>
<td>20.71</td>
<td></td>
<td>2.71</td>
<td>1.10*</td>
<td>3.86</td>
<td>23.97</td>
</tr>
<tr>
<td>10th round</td>
<td>3.93</td>
<td>2.35</td>
<td>11.93</td>
<td></td>
<td>1.37</td>
<td>0.32</td>
<td>2.19</td>
<td>14.12</td>
</tr>
<tr>
<td>11th &amp; 12th</td>
<td>2.37</td>
<td>6.14</td>
<td>15.31</td>
<td></td>
<td>1.26</td>
<td>1.03</td>
<td>2.31</td>
<td>17.65</td>
</tr>
</tbody>
</table>

* For purpose of comparison, the norm was taken as 4 to 6 hours per day as in the case of other rounds for moderately underemployed.
<table>
<thead>
<tr>
<th></th>
<th>Average number of days per week.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>At work</td>
<td>Had work but abstained</td>
</tr>
<tr>
<td>Rural</td>
<td>5.94</td>
<td>0.70</td>
</tr>
<tr>
<td>Urban</td>
<td>5.84</td>
<td>0.96</td>
</tr>
</tbody>
</table>

"To be meaningful this type of information should relate to a long period such as year. But collection of such information in respect of each person for a year is not perhaps a practicable proposition unless repetitive monthly/fortnightly or weekly visits are organised."¹

Commenting on the present state of data on employment and unemployment in the rural sector, Prof. K.N. Raj has written in his paper "The different criteria that have been adopted for estimating underemployment (in some cases, the number of days or hours during which the "gainfully employed" persons are seemingly idle, and in others the number of days or hours for which they would like to have additional employment), the failure to distinguish between employment within households and employment outside, and above all the attempt to measure the idle labour available without reference to any particular wage...

rate, can lead to only one conclusion that such data as are available now can only be regarded, at best, as hotch-potch statistical aggregates which can be interpreted in a variety of ways. ¹ Whatever may be the limitations of the existing data and difficulties in quantifying in precise terms the estimates of unemployment and underemployment, it is obvious that unemployment and underemployment in the conventional sense is considerable in India. The various round of NSS have yielded varying estimates of the unemployed, ranging from 0.05 percent to 1.44 percent of the total rural population, depending on the measurement concepts and procedures employed. However, from such data as are available it would appear that the underemployment in acute form are likely to be found amongst the agricultural labourers and the self employed cultivators with small holdings.

The Studies in Measuring Disguised Underemployment in India:

In regard to the study of disguised underemployment not much has been done so far in India. Little practical experience has however accumulated at the national level on the study of this aspect of disguised underemployment. The Ninth International Labour Conference recommended that the

---

survey methodology through the accumulation of national experience should be developed in the sphere of measurement of disguised underemployment. NSS Report No. 14 presents data on incomes collected in the 7th round in respect of various rural and urban occupations along with data on intensity of employment. No attempt has, however, been made on the basis of these data, which were processed into average monthly incomes, to draw any conclusions regarding the extent of disguised underemployment. Data on earnings have since been collected in the various rounds of the NSS along with data on employment in respect of the reference week. Information could be collected with some accuracy only in respect of employees receiving wages or salaries. No satisfactory data are available in respect of the self-employed people who constitute a large part of the employed population and in whose case disguised unemployment is supposed to be more intense. The data, of late, are being presented in the form of distributions of persons employed according to weekly earnings. It is not clear as to what conclusions can be drawn from these data as to the extent of underemployment which can not be drawn from the data on hours or days worked because low weekly earnings may be due to fewer hours worked. To isolate disguised underemployment from visible underemployment, it would be necessary to work out a distribution of the employed persons according to average hourly or daily earnings.
The concept of disguised underemployment seems to be restricted to a situation where jobs or occupations are "inferior" in relation to the capacities or skills of the employed persons. Such a situation which may be forced by the absence of adequate employment opportunities, necessarily means low level of earnings as the productive capacity of the persons are not fully utilised (except in terms of working time). Thus skill under-utilization or abnormally low income corresponds to disguised underemployment. Skill-utilization is perhaps of the greatest significance to industrialised economies which are subject to cyclical and more importantly, to rapid technological changes with little shifts in the demand for different types of skill. National experience in the measurement of this aspect of disguised underemployment has been limited to date. On the other hand, it has been studied from the standpoint of income inadequacy in several countries. In countries with low per capita income it would seem that practical possibilities to mitigate this form of underemployment are limited. This may perhaps partly explain why it has not yet received much emphasis in the surveys relating to underemployment in the developing countries with low per capita income. Added to this are the difficulties of setting realistic income norms in the context of sharp income disparities and the technical problems of estimating income of the self-employed.
To measure the extent of disguised under-employment, a set of norms in terms of hourly or daily earnings would be required to serve as the bench-marks against which the earnings of individuals could be judged. The ILO suggests for this purpose the minimum wage rates laid down by law or collective agreement or generally in force for the kind of work such persons could perform in the environment concerned. There is no statutorily fixed national minimum wage in India. Minimum wages are fixed for specified occupations in specified branches of employment on a regional basis under the minimum wages act. To the extent minimum wages are regulated, the question of persons being paid at lower rates does not usually arise. Can the minima so fixed be taken as bench-marks for comparable occupations in other branches of employment? There is apparently no uniformity in the minimum wages fixed under the law. Wage rates fixed through collective agreements or under awards are based on several considerations such as needs of the workers, capacity of the industry to pay and the rates obtaining in other industries in the area. The rates so fixed differ from industry to industry and from region to region. How far can these data be used for other industries? The concept of "Wages generally in force" can only be interpreted as the model wage for the occupation. This can be determined from the type of data available in respect of the day or the hour. For an analysis of this nature occupations have to be more precisely defined than usually possible through a sample survey. Among the three
approaches discussed above for defining norms, the third appears to be a more useful approach provided that occupations could be distinguished in a firm manner. A more basic question, however, arises: Should the norms differ from occupation to occupation, industry to industry and region to region? It is not unlikely that for the same occupation, an industry may be paying less than in most other industries depending on the capacity of the industry to pay and the bargaining power of the labour. A common norm can perhaps be thought of in respect of unskilled labour in terms of a socially desirable level at a given stage of the economy as represented by the national per capita income, but extension of the concept to all occupations and levels of skill would be a stupendous task.

Thus, measurement of disguised under-employment through the earnings approach is beset with several difficulties. Before any conclusions can be drawn from a distribution of persons according to earnings, it is necessary to study the factors that make for variations in earnings among individuals engaged in the same occupation. Then only would it be possible to determine the criteria for distinguishing the disguised underemployed. Such studies are relevant not only in respect of employees but also and more so in respect of self-employed persons. Collection of data on earnings in the case of self-employed persons calls of different approaches for different occupations. Unpaid helpers introduce a complication as in
their case earnings cannot be separately recorded and if according to the usual NSS practice their earnings are merged with those of the principal earner, the case of the latter also gets complicated.

Experience Acquired in Measuring Potential Underemployment:

The measurement of potential underemployment is beset with greater difficulties in the existing conditions. Its measurement would be quite useful for policy purposes in countries where labour is scarce. In India where the employment policies and programmes are still conceived of in terms of provision of adequate work opportunities to new entrants to labour force, it will amount to sheer waste of effort. While potential underemployment is the largest underemployment category in underdeveloped countries in the sense of comparing of the techniques of production with those in advanced countries only a fraction of the employed would be required for maintaining the existing level of production. In terms of effect, it merely expresses the whole complex of underdevelopment in employment terms. It is the reason for considering it to be of little operational value. The ILO suggests that the productivity of a given establishment should be compared with the average productivity observed in pilot establishments considered to be operating under satisfactory conditions of employment and a given technological level. The
study is thus at the establishment level and not at the individual level except in the case of own account workers. A study has been made by the Programme Evaluation Organisation to measure the potential under-employment in forms in a few development blocks. Farms were classified into a number of categories by a combination of different levels of irrigation facility, cropping pattern and number of adults working per acre of land. Within each cell, the farms were arranged in the ascending order of man-days per acre. The top quartile in each cell was taken to represent the optimum level and the productivity of other farms within each cell was compared with the average level of the top quartile. The method is similar to the one suggested by the ILO but it is obvious that once it is decided to take the top quartile as the optimum level, the lower 75 percent would automatically constitute units of potential underemployment. Thus in the case of agriculture, potential underemployment was attempted to measure in terms of labour input per acre of land cultivated.

Conclusions:

So far as visible underemployment is concerned, there is a good deal of material in the reports of the National Sample Survey. It has perhaps received the most attention in recent surveys because of the fact that the relevant data can be obtained as part of a labour force sample survey at little

extra cost. The national surveys conducted in India do not make attempt to identify invisible underemployment. The present method of treating seasonal unemployment as a part of current unemployment and supplementing the data with a picture of current underemployment measured in terms of days worked and hours worked would be adequate to quantify the total volume of unemployment and underemployment. The existing information provide little knowledge about the pattern of unemployment and underemployment, the extent of chronic unemployment, the nature and intensity of seasonal variations in current under-employment, etc. To study all aspects of unemployment and underemployment in detail, it may be necessary to take up intensive studies of selected families through repeated visits over a period of a year. Such studies can not obviously be taken up through large scale surveys. They may be taken up on a limited scale in selected areas more with a view to gaining an insight into the problems rather than to work out national or regional estimates. Dr. J.P. Bhattacharjee made an attempt to measure the nature and extent of underemployment among farmers in India with the help of farm management data collected from two samples of farmers in the north and the south plain regions of Bihar during 1957-58. He followed the approach suggested by Prof. Rosenstein Rodan. Underemployment on the farm has been measured in terms of the unutilised portion of the available supply of self-employed and family labour at the present

level of output and with the existing techniques of production. The total degree of underemployment has been estimated separately for each family through a man-power budgetting approach, and broken down into its seasonal, disguised removable unemployment and disguised fractional components. Mr. A Qayum also tried to analyse the visible underemployment and disguised agricultural underemployment in U.P. and estimated the extent of both types of underemployment.¹

Agricultural Labour Enquiries: Estimates and Assessment:

Agricultural labour forms the largest occupational group in the economy of our country and it has been on the increase. The proportion of agricultural labour to total population in the rural sector was estimated at 10 percent in NSS rounds and 13 percent in the Agricultural Labour Enquiry. According to 1951 census, the agricultural labours make up one-fourth (26.7 percent) of the total labour force in India. Similarly the proportion of agricultural labour to the gainfully employed population was 44.47 percent in the NSS rounds and 49 percent in the Agricultural Labour Enquiries. The discrepancy between the census, the ALE and the NSS estimates may then be sought in the differences of concepts adopted and the procedures followed.

The first Agricultural Labour Enquiry was conducted by the Ministry of Labour, Government of India in 1950-51. This enquiry was concerned with the problems how the agricultural labours live and work. It has furnished data on the pattern of employment and the economic conditions of agricultural labourers as a whole. On the recommendations of the Second Five Year Plan, the Second Agricultural Labour Enquiry was conducted under the auspices of Ministry of Labour and Employment by the NSS in collaboration with the C.S.C. with "a view to having broadly a comparative picture of the conditions of agricultural labourers in the country as between 1950-51 and 1956-57".

Though the Second Enquiry was launched with the avowed purpose of making a comparative study of the position of the agricultural labourer between two dates it has not succeeded in making its findings comparable with those of the First Enquiry. Doubts have, however, been raised in regard to the validity of the comparisons on grounds of differences in the design, definitions, concepts and procedures followed in the two surveys, comparison of the two enquiries would be limited and there is very little to compare between these two Enquiries. Even limited comparison would not be possible without making suitable adjustments in some conclusions and further analysis in others. Therefore no firm conclusions can be drawn from a comparison of these two Enquiries. Some have
tried and misinterpreted the data for revealing a conclusion that a comparison of the findings of the two enquiries showed a deterioration in the levels of living of agricultural labourers. The consensus of opinion is that the concepts used in the two enquiries are so divergent that it is altogether not possible to put the data "for comparing the position in 1956-57 with that revealed for 1950-51 from the first enquiry."

The First Agricultural Labour Enquiry was the first attempt to estimate rural unemployment comprehensively on an India scale with any precision. It is obvious that the data collected during the said Enquiries were related only to what is considered as current unemployment. In neither of the two Enquiries was any attempt made to evaluate disguised unemployment.

In the first Agricultural Labour Enquiry information on the number of days employed on wage-paid labour and the number of days unemployed during each month was obtained in respect of the agricultural labourers in a fixed set of families. The monthly data were added up to produce estimates of the average number of days employed and unemployed per year. The data collected each month however related only to persons who had at least some wage-paid employment during the month and thus introduced an error in the estimate of the number of days unemployed in so far as the labourers who did no wage-paid labour during the month were excluded, they constituted
16 percent of the total. In the Second Agricultural Labour Enquiry, the number of days at work on wage employment and self-employment and the number of days not at work were recorded for the preceding week in respect of each person contacted in a moving sample of households and the data related to agricultural labourers (classified as such on the basis of the usual status) were inflated to provide estimates of the number of days employed and unemployed per year. The following Table No. 3.3 points out the change, if any and summarize the employment and unemployment figures given in the two surveys in detail.

The first Agricultural Labour Enquiry revealed that on an average male casual-labourers were employed for wages for 200 days in the year in agricultural and non-agricultural activities and attached male labour for 326 days in the year. The casual and attached agricultural labourers were self-employed 75 and 20 days respectively in 1950-51. According to the Second Agricultural Labour Enquiry, the casual adult male labourers were employed on an average for wages for 197 days and self-employed for 40 days and attached labourers 259 days for wages and 16 days self-employed. Casual adult female workers were employed for wages for 134 days during 1950-51 and for 141 days during 1956-57 at all India level. Women were self-employed during 1956-57 for 27 days on an average. No self employment figure for women is available for 1950-51. As regards children, their wage employment
Table No. 3.3

Employment and Unemployment (average Number of days per year).

<table>
<thead>
<tr>
<th></th>
<th>Employment in Agricultural activities.</th>
<th>Non-Agricultural activities.</th>
<th>Total Wage employment</th>
<th>Self Employment</th>
<th>Total Employment</th>
<th>Percentage increase or decrease over 51-52 in total employment.</th>
<th>Average days of work per month.</th>
<th>Average days of days with un-employment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-51</td>
<td>56-57</td>
<td>50-51 56-57</td>
<td>50-51 56-57</td>
<td>50-51 56-57</td>
<td>50-51 56-57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men-All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>194</td>
<td>29</td>
<td>218</td>
<td>222</td>
<td>65</td>
<td>33                                           -10</td>
<td>82</td>
<td>110</td>
</tr>
<tr>
<td>Casual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>167</td>
<td>33</td>
<td>200</td>
<td>197</td>
<td>75</td>
<td>40                                           -</td>
<td>90</td>
<td>123</td>
</tr>
<tr>
<td>Attached</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>315</td>
<td>259</td>
<td>11</td>
<td>326</td>
<td>231</td>
<td>20</td>
<td>16                                           -</td>
<td>19</td>
<td>63</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>131</td>
<td>14</td>
<td>134</td>
<td>141 N.A.</td>
<td>27</td>
<td>134                                           26</td>
<td>N.A.</td>
<td>19.0</td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>137</td>
<td>15</td>
<td>165</td>
<td>204</td>
<td>&quot;</td>
<td>44                                           &quot;</td>
<td>&quot; N.A.</td>
<td>20.7</td>
</tr>
</tbody>
</table>


had increased from 165 days in 1950-51 to 204 days in 1956-57. They were self employed for 44 days on an average in 1956-57. The employment of all adult male agricultural labourers had increased by 4 days.

From the data collected it appears that the employment situation has deteriorated as compared to 1950-51 and during this period there was a fall in the number of self-employed and a rise in the number of persons offering for wage employment in the rural areas; unemployment increased considerably during this period for casual and attached labourers.

But the figures were not comparable owing to changes made in the procedure of calculating unemployment. The method of estimation of employment and unemployment was different in the two enquiries. In the First Enquiry employment data was collected in respect of wage earners of the sample household every month for a period of 12 months and thereafter annual estimates of employment and unemployment data related to earners of sample households of moving sets of villages which changed from month to month for a period of 12 months. The reference period in the Second Enquiry was a week preceding the date of enquiry.

During the First Enquiry, no meticulous attempt was made to measure the varied economic activities in quantitative terms and no norm for a working day was fixed. Wage employment
for half the day or more was counted as full day's occupation and less than that was ignored. All those who worked even for a day in a month were taken to have been gainfully employed. Unemployment data were collected from only those adult male labourers who reported wage employment in each month (thus ignoring persons who worked on their own account, and were temporarily without work, as well as others who happened to have no wage employment during the reference period). "Thus for those of the labourers, about 14 per cent on an average in each month during the year, who did not report wage paid employment, it was assumed that they were self-employed for half the period" after deduction of wage employment data and unemployment data from 356 days. Thus the estimates of self-employment were derived as a residual (by deducting the number of days of wage employment and unemployment from a total of 365 days) and of an inferential nature.

In the Second Enquiry, measurement of the quantum of employment was based on a norm which was more scientific in terms of the intensity of employment. Information was collected on the diversified activities in which agricultural labourers were employed during the reference period. The length of the working day was taken as 10 hours and the reference period was taken as 7 days prior to the date of the survey. In the second ALE intensities of employment were more precisely measured. For this purpose intensity classes laid down were full,
half, nominal and nil. A full day's work meant three-fourth or more of the normal working hours i.e. 10 hours per day. More than one fourth and less than three-fourth of the normal hours was considered as work with half-intensity. Less than one-fourth was deemed as nominal work with one eight intensity and nil intensity signified no work done during the reference period. The data collected during this enquiry covered both those who had wage employment as well as the self employment and it was the estimates of unemployment which were derived as a residual (by deducting the number of days of wage and self employment from a total of 365 days. Persons working from 4-7½ hours were taken in the Second Enquiry as employed for half day (as they were falling in the category of persons employed with half intensity) while in the first enquiry they were taken as engaged for full day. The persons working between 2½-4 hours a day were ignored in the first survey and were taken as employed for half-day in the second. Also those with less than 2½ hours work were ignored in the first enquiry but taken to have worked with 1/8 intensity in the second. The FSS data drawn from Report 43/1 (11th and 12th rounds: Period August 1956 to August 1957), with which the Second Enquiry was integrated, show that the number of persons working (from 1-27 hours a week with less than half day who were ignored in the First Enquiry but taken into consideration while calculating the average employment in the second, are relatively, less as compared to those who (working
from 29-56 hours a week) were taken as employed for full day in the First Enquiry and for half day in the Second. These figures do not permit to work out the extent to which the conceptual differences affect the estimates of employment between the two Enquiries. These facts show that the procedure followed in the First Enquiry resulted in overestimation of wage employment as compared to the Second. The intensity pattern in the Second Enquiry also seemed to have facilitated the calculation of unemployment of the contract workers who had wage paid employment for half the day and had no work for the other half. Thus there is possibility that the time put in for contract work may be under-estimated particularly in the Second Enquiry and the magnitude of this under estimation further increased if we took into account the fact that a very large proportion of time spent in wage paid employment in agriculture is for contract work. The self-employment in the First Enquiry was a residual from 365 days, of unemployment and wage employment, while in the second it was estimated objectively. If the residual method is applied after making necessary adjustments in the figures of unemployment in upward direction and in those of wage employment downward, the position in respect of self-employment may not have worsened as between the two Enquiries.

Thus the employment data collected during the two enquiries are not strictly comparable in view of the improved methods adopted during the Second Enquiry. The collection of
employment data during the First Enquiry was less precise than in the Second Enquiry. The method used in the First Enquiry is likely to have overestimated the number of days of wage-employment and under-estimated unemployment. Self-employment data was not collected separately in the first survey but was only of an inferential nature as the residual days left after deduction of wage-employment and unemployment from 365 days, were taken to represent the quantum of self-employment. Unemployment data was collected only for wage-paid male earners. Employment data was not collected according to intensities. The methods used in the Second Enquiry were more accurate than those of the First Enquiry. Therefore the data collected during the Second Enquiry were supposed to give a more accurate estimate of the employment situation and the estimates of the First Enquiry were rather on the highside and somewhat imprecise. Though a firmer quantitative estimate is not possible on the basis of the available data, a rough estimate suggests that it is unlikely that the number of days of employment were perhaps any lower in 1956-57 than in 1950-51, in view of the differences in methods used in the two Enquiries.

In conclusion, the revelation of the Second Enquiry regarding the decrease in employment and the consequent rise in the quantum of unemployment during First Enquiry to Second Enquiry is to some extent apparent and not real. The broad conclusion which emerges is that if no marked improvement was recorded in the rural employment sector during 1956-57 no deterioration worth-mentioning had also taken place either.
The results of the two enquiries show that rural worker remained unemployed three to four months in the year. They were affected much more by economic reasons for under-employment than the rest of the gainfully employed. Even in the peak period not more than 87 percent of the male labourers could find wage paid employment. Idleness averaged seven days per months for the whole year and 16 percent of all male labourers could not find employment at any time during the year. Attempts have been made to measure the extent of rural unemployment and underemployment in terms of man years. Basing his calculations on the results of the First Agricultural Labour Enquiry which revealed that about 16 percent of the cultivating labourers in India were totally unemployed, Dr. Rao arrived at 2.4 million as the number of unemployed among agricultural labourers. No information was available about the unemployed among the non-agricultural workers in the rural areas who numbered about 4.9 million. Applying to them a rate of unemployment that was half of the rate among agricultural labourers, he derived a figure of about 0.4 million. He further calculated 12.5 million and 1.5 million underemployment among agricultural and non-agricultural population respectively. Therefore, on certain assumptions in the rural sector 2.8 million and 14.0 million labourers agricultural and non-agricultural, were assumed to be unemployed and underemployed respectively."

In the rural sector, taking into account only

those who can be regarded as in the working force in the agricultural labour class and who obviously seek work in the open market, it is probable that, on the average, they fail to find employment at the current wage rate for one fourth to one third of a working year (of 300 days), if not even longer periods; this would be equivalent, ineffect to the total unemployment of approximately 4-5 million persons at the very minimum."¹ According to the Second Agricultural Labour Enquiry the total number of agricultural labourers are 33 million. This enquiry adopted a labour time disposition approach. On the basis of this Enquiry, an agricultural labour on an average would appear to be unemployed for 110 days during a year for want of work. This would yield about 3630 million unemployed man-days or about 10.8 million unemployed man year (on the basis of 300 working days a year) or about ½ of all the agricultural labours in the aggregate.

Findings of the Farm Management Studies:²

The Farm Management studies were initiated and co-ordinated by the Directorate of Economics and Statistics, Ministry of Agriculture and sponsored by the Research Programme Committee, Planning Commission with a view to collect data and comprehensive information on employment and related aspects

---

2. These studies were undertaken initially in Bombay, Madras, Punjab, U.P. and West Bengal from 1954-55 and in Madhya Pradesh from 1955-56 to 1956-57.
of cultivators' families for planning agriculture. An attempt has been made to fill the lacuna of relevant information through these studies, conducted in six typical regions\(^1\) of the country initially and later extended to Bihar. In each of the region, two contiguous districts were selected for the study in such a way that they represent the most important and typical soil and crop complexes in the state concerned. Cultivators, the ultimate sampling units, were selected by the multistage stratified random sampling methods. Each district was divided into two homogenous zones with regard to climatic and agricultural conditions. From each zone, five villages were selected at random with probability proportional to cultivating population. All the cultivators in the selected village were arranged serially according to increasing or decreasing size of holdings and divided into five equal groups in the case of West Bengal, Madras, U.P. and Punjab and in four groups in Bombay. Two methods, cost accounting method and the farm business survey method, have been adopted in the enquiry except in Madhya Pradesh where only the former method has been tried. Although original selection of the villages was related to the major crops to be studied but from each group two cultivators were selected at random for study and detailed information on employment of the members of the cultivators families were collected alongwith other relevant information required.

---

These case studies give information for selected regions only and thus do not give an integrated picture for the country as a whole. The scattered bits of information provided by these studies provide only tentative statements on certain aspects of the problem but such information contained in them throw light on some of the important problems relating to employment in agriculture. The analysis of the data of these studies makes obvious the following conclusions (i) the average size of family increases with the increase in the size of farms. (ii) employment on farms depends on various factors including (a) the size of the farm (b) irrigation facilities (c) cropping pattern (d) intensity of cropping (e) climatic conditions etc. (iii) The number of earners per acre vary from region to region it decreases with increase in the size of farm. (iv) The number of labour days hired out is a function of economic and social factors; persons operating on lower size farms have more labour days hired out; with increase in the size of the farms, greater employment is available at the farm itself (v) Productive employment of per worker falls short of normal requirement in varying degrees. It varies from 113 to 129 days in West Bengal, 212 to 242 days in Madras; 255 to 280 days in U. P. and 261 to 274 days in Punjab. Low employment is quite conspicuous in the case of Madras and West Bengal regions. This is indicative of the existence of a widespread underemployment in the Agricultural Sector in the country. Possibly, a considerable, number of workers at present engaged
in agriculture can be withdrawn without seriously affecting the production level especially from farms falling in lower size groups. These workers can be taken out only if some other avenues of gainful employment are made available, to them. This withdrawal of workers will also help in raising the intensity of employment and productivity of labour of the remaining workers. (vi) Conversion of total employment in man-hours per day has no special significance in rural areas. (vii) The number of days including sickness in different regions varies from 97 to 129 days in West Bengal, 76 to 116 days in Madras, 67 to 89 in U.P., 67 to 79 in Punjab and 75 to 80 days in Bombay. (viii) Pattern of seasonal employment is quite irregular even when persons permanently engaged in agriculture do not get regular and full employment, there is a necessity due to seasonal character of agriculture for hiring casual labour on small farms also during peak agricultural season.

In general, the conclusions are three: (a) The existence of widespread underemployment in agriculture, (b) the seasonal character of the problem, and (c) the uneconomic size of holding are mainly responsible for regional disparities.

These studies also provide information of labour inputs for different crops in different regions. If this information has been related to the data regarding area under principal crop the total labour input for raising
the crops may come. Generalising on this basis, one can workout the total human labour required for raising crops and on that basis and the estimates of labour force engaged in these activities, a rough estimate of the extent of underemployment can be reached. The following are the limitations of such analysis: (i) The conclusions on the basis of only one year's study are applied for all years. (ii) Data are available only for five region and the norms in one State for a crop may not be applicable to the same crop in another State in the same or other regions. (iii) The norms themselves do not appear to be complete in the sense that all the crops in the country are not covered. (iv) Up-to-date data regarding irrigation and the crops irrigated are not available.

On the above norm, total work on farm required for the output of different agricultural commodities produced in the year 1957-58 amounts roughly a little more than 6 crores man days. Making an allowance of 20% (N.S.S. and Agricultural Labour Enquiry Estimates) for non-farm work, the number of man-years will be 7.2 to 7.3 crores. This means that if agricultural activities have to be carried out at the existing state of technology, it would be enough to have for this activity a labour force of about 7.2 to 7.3 crores as against the actual number working on land. This is a generalisation on the basis of averages; it would not apply to peak periods of agricultural activity.
We must now arrive at an estimate of the number actually employed. The census, 1951 has been planned the number of self-supporting and earning dependents among the agricultural classes (has been placed) at 10.2 crores. Making an allowance of the increase in population every year, the total number of self-supporting and earning dependents among the agricultural classes will be 11 crores, i.e. an increase of about 0.8 crores for a period of six to seven years. Thus the estimate of underemployed arrived at will be of the order of 40 million in agricultural sector in 1957-58 of which 97 percent is found in rural and 3 percent in urban sector.

Estimates of Unemployment and Underemployment in Plans:

Planning in India has always been vitally concerned with its impact on the employment situation in the country. The expansion of employment opportunities is one of the principal objectives of economic planning in India since 1951-52. It was so in the first two plans and it appears that it will be so for the next several plans. Expansion of employment opportunities commensurate with the increase in the labour force over the plan period is conceived as one of the principal aims of the Third Plan. "Unemployment is not merely an economic problem, it is a social problem involving human values and has to be approached from a broader social viewpoint."
Indian Plans recognise the importance of the problem of unemployment and devoted a fair amount of attention to its solution. But it has been looked on as by-product of the economic development. "It is now widely recognised that the problem of unemployment especially in an underdeveloped country like ours, can only be solved after a period of intensive development. In determining the programme for the next five years, the prime consideration is that at least the deterioration in the unemployment situation should be arrested." These were the views of the Planning Commission at the time of the Second Five Year Plan. The same viewpoint of treating employment as a product of development persists during the Third Five Year Plan period as the following extract shows "Full utilisation of manpower resources can be achieved after a considerable period of development." 

In the Draft Outline of the First Five Year Plan, the planner admitted that "maximum production, full employment, lower prices, greater equality of incomes all these can not, under certain conditions go together." The objectives are not all complementary and some of them are competitive. The Draft Outline of the First Plan rightly said that "the quality of a plan depends on the soundness of its judgement regarding

3. First Five Year Plan (Draft Outline), p.17.
priorities as between objectives. It is true that employment was not given any place of priority in the First Plan. It was prepared to correct the disequilibrium which was caused due to war and partition and was not a plan for employment. This can be also evident from the minor importance given to employment in the First Plan by adding a small chapter at the end. It gave a picture of the different kinds of unemployment existing in India and did not embody and definite policy for creation of employment opportunities. The reason for this less significance was that at the time of First Plan unemployment was not very acute. Therefore the First Plan emphasised on maximum production as an immediate measure to check inflation, assigning very little importance to employment.¹ This can be obvious from the Draft Outline when it says that "a programme of full employment can be implemented only after some progress has been made in removing the structural deficiencies in the economy which now stand in the way of its expansion.²

Though the problem of unemployment had begun to assume considerable significance from the year 1953-54 onwards but in spite of its attempts to increase employment opportunities, it could not realise its objective and the Second Plan began with a more backlog unemployed left from the First Plan period.

². First Five Year Plan, Govt. of India, Planning Commission, p. 19.
The Second Plan was formulated with four objectives including a large expansion of employment opportunities." As a major objective of the Plan, it was accepted that the Second Plan should not allow the unemployment situation to worsen, i.e. its employment orientation should be such as would absorb an equivalent of new entrants to the labour force in the plan period-in-course of five year period. Although it is popularly assumed that the Second Five Year Plan was more employment oriented than first plan, there is very little factual basis for this assumption. This belief seems to have arisen mainly out of the fact that whereas the First Plan emphasised the need for expansion of employment opportunities in a general way, the Second Plan indicated a definite way. The target was fixed so as to avoid a worsening of the employment situation in view of the additions to the labour force through population increases during the plan period. Apart from the fixation of a target in the matter of employment the Second Plan, as it laid down emphasises on the development of heavy industries, had to pay special attention to the problem of creation of employment elsewhere. In other words, because the core of the Second Plan was not employment-oriented (atleast in the short run), its framers had to devise an employment strategy. According to Prof. Vakil and Brahmanand the approach to the problem of unemployment during the First Plan was one of a series of remedies ..... designed more or less on an adhoc basis." The same approach was
to the problem during the Second Plan too. The Third Five Year Plan does not promise to solve the unemployment and underemployment problems but expects to maintain the status quo by creating enough jobs to absorb all the new entrants to the labour force over the next five years. While emphasising that the employment problem had to be looked at from the long term point of view, the plan aimed at preventing at least deterioration in the unemployment situation in the course of the five year period. The Third Five Year Plan also recognised the difficulties to be faced in reaching its employment objective. It said, "until the economic structure is strengthened and the economy is able to meet its growing requirements of equipment and raw-materials largely from its own resources, it is difficult to absorb even the entire addition to the labour force into increasingly productive work at a reasonable level of wages." Since the inception of First Five Year Plan in India the task before the country in the sphere of creation of employment opportunities was threefold. Firstly, jobs had to be created for the existing unemployed both in the rural and in urban areas. Secondly jobs had to be made available for new entrants to the labour-force who each year or during the plan period will come of age to seek work; Lastly opportunities for additional work had to be created for those who are underemployed in agricultural and household occupations in rural and urban areas.

1. Third Five Year Plan, Planning Commission, Government of India, 1961, p.25, Inter alia see also page 10.
The First Five Year Plan had the employment aim of the order of 5 to 6 million, but it succeeded in creating direct employment in the public and private sectors to the tune of 4.5 million. The Second Five Year Plan started with the backlog of unemployment of the order of 5.3 million and 10 million would be new addition to the labour force during this plan period. The extent of unemployment of the Second Plan would be 15.3 million. The following table shows a static estimate of the extent of unemployment as at the end of the Second Five Year Plan period.

<table>
<thead>
<tr>
<th></th>
<th>Urban Areas</th>
<th>Rural Areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Backlog of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unemployed.</td>
<td>...</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>(ii) Additions to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour force</td>
<td>...</td>
<td>3.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Grand Total</td>
<td>...</td>
<td>6.3</td>
<td>9.0</td>
</tr>
</tbody>
</table>

From the above table it is clear that to eliminate unemployment 15.3 million new jobs were required to be created. As against this a target of 10 million jobs was fixed for the Second Plan. Out of these 10 million, at least 8 million jobs were to be created outside agriculture and the remaining 2 million persons will get employment in the agricultural sector.
The experience of the operation of the Second Plan shows that the employment target has not been fulfilled as envisaged. It is estimated that an investment of the order of Rs. 6750 crores could provide employment altogether to 8 million persons during this plan. 6.5 million outside agriculture and 1.5 million in agriculture. Whatever may be the causes, the fact remains that the backlog of unemployed would increase from 5.3 million in 1955-56 to 9.0 million in 1960-61; in spite of the declared employment orientation of the Second Plan. Therefore it is quite obvious that the objective which the Second Plan started, namely, not allowing the unemployment situation to worsen during the operation of the plan will not be achieved. The Second Plan's failure to reach its employment target raised the backlog of unemployment at the beginning of the Third Plan from 5.3 million to 9.0 million. The new entrants to the labourforce are estimated in the Third Plan at 17 million. As against this, considering the size and pattern of investment during the Third Plan, it is estimated that it may provide additional employment of the order of 14 million - 10.5 million outside agriculture and 3.5 million in agriculture. Thus, even for providing work for the new entrants to labourforce, there should be additional employment for three millions. If unemployment is to be eradicated during the Third Plan period, we would have the colossal task of providing fresh employment opportunities to about 26 million during this period. There are no specific programmes indicated for the balance of 3 million
new entrants in the labour market. But the Planning Commission's Third Five Year Plan report says that finding employment for these, "is considered to be an essential objective in the Third Plan". The report has suggested that the problem should be approached along three main directions for providing employment to these 3 million persons. Firstly, "efforts should be made to ensure that the employment effects are spread out more widely and evenly than in the past. Secondly, a fairly large programme of rural industrialization should be undertaken with special emphasis on programmes of rural electrification, development of rural industrial estates, promotion of village industries, and effective re-development of manpower....... Thirdly, in addition to other measurers, it is proposed to organise a rural works programme, which will provide work for an average of say, 100 days in the year for about 2.5 million persons and, if possible, more."¹ It is also estimated that 3 million persons would be unemployed from underemployed category due to changes in old economic and social institutions as the effects of industrialization and urbanisation have increased on the economy during this period. Excluding these 3 million persons, the Third Plan hoped to provide employment for 16.5 million as against the estimated 26 million.

¹ The Planning Commission has also envisaged certain changes

in the employment structure over the next 15 years. In taking this long term look, it is assumed that a substantially larger proportion of the employment opportunities will be in the non-agricultural sector and that about two thirds of the 70 million addition to the labour force during 1961-76 will be absorbed outside agriculture. Under these assumptions, the Planning Commission stated that "it would be possible to reduce the proportion of the working force dependent on agriculture to around 60 percent by 1976."\(^1\) On the basis of this assumption that one third the additional labour force will have to be absorbed in agriculture, agricultural, employment will have to be found for about 23 to 24 million persons during the next 15 years. In addition, there is also the task of providing fuller employment to those who are at present underemployed in the agricultural sector estimated to be of the order of about 15-18 million.

On the basis of the investment labour ratio worked out in the experience of the Second Five Year Plan, the volume of investment of the Third Plan may create additional employment of the order of 12 million instead of 14 million.\(^2\) The experience achieved so far in the execution of the Third Plan in the sphere of creation of employment opportunities shows that the target of 14 million may fall short by 2 million. It is likely to be a possibility that the increase in the labour

---

force in the Third Plan period would be more than the estimated 17 million. The expectation, as was originally conceived that the proportion of the agricultural population to the total population shrink from 70 percent to 60 percent during a 15 year period seemed to be hopeless and futile and under-estimation of the present trends. The rural works programme sofar had been able to achieve 0.75 million mandays whereas it was intended to absorb about 2.5 million persons with work on an average of 100 days in the year. "At this rate of development, it is estimated that possible achievement against the Third Plan tentative targets might be one-fourth in terms of expenditure and one-third in terms of additional employment." It is estimated that in the first two years of the Third Plan creation of employment in the non-agricultural sector was of the order of 3.5 million, i.e. 30 percent of the target 10.5 million and in the third year, additional employment might come to 45 percent. "At present, on the basis of output-employment ratios and outlay-employment norms as applied respectively to the physical targets so far achieved and the plan expenditure incurred, it is estimated that the additional employment generated during the first two years of the plan and likely to be generated by the end of the Third Year (1963-64) would be about 4.9 million out of 10.5 million non-agricultural employment target for the plan period as a whole, or 40 to 45 percent of the total five year target."  

Thus, this was in the line with the rate of investment, "may be somewhat less", much remained to be done in the remaining period of the Plan. In conclusion, in view of the performance of the first three years it is certain that we may not be able to achieve the target. Even taking a liberal view, during the Third Plan, there will be a further addition of 5 million of the unemployed labour force to the back-log large enough to reduce substantially existing unemployment and underemployment. "While the present Government is aware of the gravity of the problem which faces the country; its financial and economic policies often create a situation, which is not at all conductive to fuller employment. At present, allocation of resources between the different sectors of the economy often is governed by considerations other than those of maximizing production and employment . . . . . . . The unemployment problem in our country should be viewed, not as a residual problem to be tackled after other problems have been solved, but as the primary problem". Though the employment has been a major objective of planning in India and the goal of planning regarding employment is to absorb in gainful employment in each five year plan period at least the equivalent of new entrants to the labourforce. But these objectives and goals have hardly been kept in view in the actual formulation or execution of policies.

Our employment situation is worse to-day than what it was at the time of the formulation of the Third Plan. The two most distressing features of the present employment situation are that the number of persons to be provided with jobs is much more than what was estimated at the beginning of the Third Plan and the scheduled rate of creation of employment opportunities had not been achieved. In the light of the 1961 census results, it is obvious that the backlog at the end of the Second Plan period would be much higher than 9 million and the net addition to the working force during 1961-66 will be much more definitely than 17 million. The creation of employment in the non-agricultural sector in the first two years of the Third Plan had been only 30 percent of the target. At this rate only 75 percent of the target would be reached by the end of the Third Plan period. Thus, for the present situation two factors are responsible. Firstly, population is increasing more rapidly than was expected earlier and secondly, employment creation under the plan is shrinking, because in many sectors of the economy the production targets of certain important and basic industries in the sense of accelerating economic development and creating employment are not likely to be reached. As a result the anticipated additional employment had not been generated. Therefore the creation of less employment opportunities is likely to inflate the backlog of the unemployment opportunities.
is likely to inflate the backlog of the unemployed at the end of the Third Plan to something like 17 million, against 12 million originally estimated. Of course, the adverse consequences of the population explosion of 1951-61 is one of the factors responsible for the present situation and others are the slowing down of the rate of economic development and the tardy implementation of certain employment generating programmes. But the present state of affairs is mostly due to the current policies of government regarding employment. The government regards employment as a mere by-product of development whereas it should be regarded as a primary objective. The way is only this that "our economic policies and plans must become much more employment oriented than they have been so far." Greater stress should be laid on the objective of employment promotion and all policies and plans must become much more employment oriented than they have been so far". Greater stress should be laid on the objective of employment promotion and all policies and plans of the Government should have one main guiding principle, namely, whether they can create the conditions necessary for an increase in employment henceforward to achieve the employment target of the Third Five Year Plan and to check the deteriorating situation of employment further.