

**Measurement of Employment, Unemployment,  
and Underemployment**

**N. Gopalakrishnan Nair**

**Discussion Paper No. 72**

**Kerala Research Programme on Local Level Development  
Centre for Development Studies  
Thiruvananthapuram**



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# Measurement of Employment, Unemployment, and Underemployment

N. Gopalakrishnan Nair

## 1. Introduction

Over the past half-a-century, the nature of the problem of unemployment in Kerala has undergone significant changes. Although Kerala has been in the forefront among the Indian States in respect of literacy and education, the problem of unemployment among the educated has been not of any serious magnitude here mainly because Keralites easily sought and got jobs elsewhere in India and abroad. But the expansion in educational facilities in the State – both in school education and college education – resulted in the gradual emergence of the educated unemployed as a serious problem particularly since the beginning of the 1960s. However, unemployment among the technically and professionally qualified persons had not emerged as a serious problem till then. For the first time, the outturn of engineers exceeded the number of vacancies in Kerala during the early part of the Sixties. Gradually the situation worsened. One of the main reasons for this worsening situation was the fact that the rate of growth of the productive sectors of the economy of the State remained much lower than the growth of highly educated manpower. Another reason was the expansion of facilities for higher education in general and technical and professional education in particular, in the other States of India, particularly the neighbouring States of Karnataka and Tamil Nadu. As a result, prospects for the employment of highly qualified Keralites in other parts of the country became bleak.

During the late Sixties and in the Seventies, side by side with high rates of unemployment, there existed in Kerala high rates of wages which were higher than anywhere else in the country. This was particularly so in the case of agricultural and construction labour as well as labour in the other unorganised sectors of the economy. This situation continues to this day thanks to the high level of awareness and organised bargaining power of labour in the State. But the situation of the educated unemployed has been and continues to be different from that of these groups. Lack of sufficient employment opportunities within the State and bleak prospects of securing jobs elsewhere in the country resulted in landing the highly qualified personnel of Kerala in jobs not commensurate with their qualifications or skills in terms of nature of work and remuneration. Such personnel are often compelled by circumstances at home to take up occupations which offer them only underemployment.

In these circumstances, a study on employment and unemployment in Kerala should normally attempt to provide the following items of information:

1. the number of employed persons categorised according to sex, age, employment status, industry, occupation, regularity of employment, wage or salary or income from employment, etc.
2. the number of unemployed persons classified according to age, sex, educational level, etc.
3. persons not included under (1) or (2) above, classified according age, sex, education, present activity status, etc.
4. the magnitude of visible underemployment, i.e., (a) the number of employed persons who actually work less than the normal hours of work in the particular occupation, (underemployed by time); (b) the number of persons who apparently work for the normal duration but receive wages below the normal level of wages for the occupation, (underemployed by income); and (c) the number of persons who work in occupations which call for a level of education which is below their education level (underemployed by qualification).

In the following sections, a review of studies and surveys on employment and unemployment in India is attempted. The broad objectives of such studies, the concepts and definitions used, and the procedures employed for the conduct of surveys would be examined critically.

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N. Gopalakrishnan Nair is former Chief of Perspective Planning, State Planning Board, Thiruvananthapuram.

## 2. The Census of India

The decennial Census has been the conventional source of information on the economically active population. The censuses 1951 adopted classifications, which did not permit of a clear categorisation of the population into economically active and others. In the Census of India, 1961, each person was classified into either of the two categories viz. workers and non-workers. The approach used the usual status and the current status categorisations in combination. Thus, a person was classified as a worker if he had worked regularly during the season immediately preceding the date of the census or if he had worked at least for a day in regular (non-seasonal) work during the fortnight preceding the date of the census. In the Census of 1971, a person was treated as a worker only if he spent his time mainly in work or if he worked at least for a day in regular (non-seasonal) work during the preceding week.

In the Census of 1981, work was defined as participation in any economically productive activity. Such participation may be physical or mental in nature. Work involved not only actual work, but effective supervision and direction of work as well. On the basis of the nature of work, persons were classified into main workers, marginal workers, and non-workers. A person was treated as a main worker if he worked for a major part of the year i.e., equal to or more than 183 days. A marginal worker is one who worked less than 183 days. The rest are non-workers. The census of 1991 followed concepts more or less similar to those used in 1981.

By and large, the definitions adopted by all the censuses starting from 1961, have been mainly on the basis of a person's usual activity namely his/her the economic activity over a period of 365 days preceding the date of census enumeration. The activity so recorded need not necessarily have any relation to the exact work done by the person on the reference day. Therefore, the figures of the different censuses may be compared to make inferences regarding changes in concepts employed in the different censuses. Being based on the usual status concept, the figures of working force obtained from the censuses may be taken as an approximate upper bound to the number of employed persons.

The percentages of working force in Kerala obtained from the different censuses are given in the Table below separately for urban and rural areas. The Table shows that over the years there has been a gradual decline in the proportion of working force in Kerala. This statement is true for the rural and the urban areas taken separately also. In Kerala the tempo and pattern of economic development was obviously inadequate to absorb the entrants to labour force due to growth of population. The censuses also provide data on the distribution of the working force according to the industrial categories in which they are employed. Industry is defined as the branch of economic activity in which a person is engaged and it is determined on the basis of the end product of the activity.

**Table 2.1 Percentage of working force: Kerala**

Year	Male	Female	Persons
<b>State</b>			
1961	57.20	27.90	42.98
1971	52.61	12.06	33.06
1981	51.62	13.99	33.45
1991	44.82	12.81	28.53
<b>Rural</b>			
1961	58.35	31.40	45.11
1971	53.62	13.36	34.01
1981	52.62	16.00	34.76
1991	44.91	13.34	28.84
<b>Urban</b>			
1961	52.36	11.11	33.44
1971	48.80	6.65	29.32
1981	48.54	7.28	29.23
1991	44.57	11.30	27.66

### **3. Employment Exchange Data**

The National Employment Service regularly publishes the data on registration with the Employment Exchange. The number of job-seekers registered with the exchanges increased manifold from a mere 1.43 lakh in 1965 to nearly 44 lakh now. But the employment exchange data are known to have at least the following limitations.

1. Some of those registered are in fact employed;
2. All the unemployed do not register with the Exchange;
3. There is a possibility that the same person is registered at more than one exchange;
4. It is possible that persons who get jobs do not report the matter to the Exchange promptly for deletion of their names from among the registrants,
5. Persons who are really not interested in jobs also may register with Employment exchanges in order to get unemployment relief (now being provided by the Government of Kerala).

The Centre for Development Studies, Thiruvananthapuram, undertook a study on educated unemployment in the year 1973. This study was based on a sample from the live register of Employment Exchanges of Thiruvananthapuram and Kozhikode. It was seen that among the educated (viz. persons with educational qualifications SSLC and above), only 54.6 percent were actually unemployed. Further the dead registers of these two Exchanges showed that educated persons who had been once registered with the Employment Exchanges but later were removed from the Live Registers, for one reason or another, contained a large number of unemployed persons forming 25.7 percent of their counterparts in the live register. Using the above ratios the study worked out the number of educated unemployed in Kerala as 8.14 lakh of persons.

#### 4. The National Sample Survey (NSS)

The National Sample Survey by NSS is by far the most important source of data on employment, unemployment, and underemployment in India. The performance of the NSS in this respect and the technical practices and procedures regarding the methods, concepts, and definitions adopted for the NSS employment surveys, bring out the fact that the objectives behind these surveys are not clearly defined before starting the survey. The fact that different reference periods are being followed intermittently, in spite of the fact that the NSS has more than 48 years of experience in this respect and that they have experimented with different methods, practices, and procedures during this period, indicates that there is need to define clearly what exactly is expected of an employment survey in terms of the type of data, the extent of details and the frequency of repetition of such surveys from the point of view of planning, evaluation, and policy.

Unemployment is admittedly the most intractable of the socio-economic problems facing India. The Government of India decided to conduct regular sample surveys on employment and unemployment through the National Sample Survey Organisation. In fact, the whole design of the NSS employment enquiries and the concepts and definitions employed have been formulated keeping in view the need for assessing changes in employment and unemployment resulting from the implementation of the plans. Dr Ashok Rudra, while discussing the statistics required for planning suggested a detailed procedure for estimating the average number of working hours in each of a large number of sectors and occupations into which the working force is classified. Laborious and difficult though such studies are, they do help in understanding the nature and structure of underemployment in specific industry-occupation combinations.

Forty-five years back, the annual conference of Central and State statisticians recommended that methodological studies may be undertaken with a view to evolving a national economic indicator based on employment in the same manner as national income or consumption. No serious work appears to have been done in this direction all these years.

In India NSS started nationwide surveys on employment and unemployment from the ninth round (July-December, 1955) onwards. The sample size of the surveys of NSS was not considered adequate to provide reasonably precise estimates of the important variables and therefore, a system was developed whereby the States which were interested could choose to participate in the surveys of NSS with a State sample which is equal in size to the one adopted for the national survey. The NSS will supply data from their sample to the States. The States in turn will pass on their data to the NSS. By combining the data from the two sources the sample is doubled and more precise estimates could be made. Ever since the formation of Kerala State in 1956, Kerala has been participating in the programmes of NSS.

National Sample Surveys supply regular data on employment and unemployment in the country. They provide data on both the magnitude and the patterns of employment and unemployment with respect to characteristics such as age, sex, education, industry, and occupation. In the case of the employed, details of labour time disposition during the seven days preceding the date of survey are also collected and presented in the reports, enabling an assessment of what is generally termed visible under employment which is reflected in less hours of work than the normal. The data are also made available separately for the rural and the urban areas.

The first nation-wide survey on the subject was undertaken by the NSS in its ninth round during the latter half of 1955. In order to classify individuals into one of the three broad categories of employed, unemployed, and 'not in the labour force', the usual status approach was adopted. A person was treated as employed according to this approach if he was employed over the major part of a long period, usually a year. In effect, however, this was found to be equivalent to asking the simple, straight question "what is your occupation?" and on the basis of the answer classifying the person as employed if he/she the person reported a gainful activity. An activity was defined as gainful if the person engaged in it was remunerated directly or indirectly in cash or kind. The explanations and examples provided in the instructions to the field workers in this context make it clear that only activities which contributed to gross domestic product were to be included under gainful activities. No restriction on age was imposed.



A person without any job and was actively seeking work was treated as unemployed. The investigator is advised to exercise great care while ascertaining whether a person is unemployed or not. Some marginal gainful work done by a person once in a while was to be ignored while making the categorisation. There was no age restriction in the categorisation of the unemployed.

The labour force of a nation at any point of time is defined as the manpower available for productive work. This includes persons who are employed as well as those who are unemployed. The rest are persons not in the labour force consists of the too young, the too old, the students, persons engaged in household duties, persons living on rent, interest, dividends and pensions, and beggars and vagrants. The proportions of persons in these three categories in different age groups, education classes, industry groups and occupation groups are presented, sex-wise, separately for the rural and the urban areas.

The 1955 survey brought out very interesting figures especially in the rural areas. It was found that 43.88 percent of the rural population was employed and only 0.29 percent was unemployed. The percentage of employed in the rural areas was found to be comparable with an estimate of the total work force obtained from the Census of India, 1951. It may be pointed out here that the 1951 Census had classified persons as self-supporting persons, earning dependents and non-earning dependents. This classification could not provide the number of employed persons. However, the information on means of livelihood could be used to get a count of the number of employed persons.

The percentage of unemployed was found to be very small in the rural areas. This is characteristic of an underdeveloped economy, dominated by agriculture and allied activities, carried on mainly in the unorganised sector. The usual status approach for classifying individuals on the basis of the productive activities undertaken by them used a reference period which is more or less a year. An unemployed person is usually defined as a person who was without a job for the major part of the reference period and was actually seeking work. In the rural areas and especially in the unorganised sectors of production, the possibility of a person being totally idle for a large part of the year is very remote. He will have actually made at least marginal contributions to work in the household enterprise but will not by any means declare himself as employed. This explains why the estimates of unemployment according to the usual status are very low.

In the urban areas, the situation was significantly different. The results of the ninth round (1955) show that about 39 percent of the population was employed and 1.9 percent was unemployed.

The ninth round of NSS also provided data on the number of hours worked by the employed persons during the seven days immediately preceding the date of survey. The distribution of workers according to weekly hours worked gave an indication of the intensity of work of the employed. This gives a direct picture of the extent of visible underemployment in the country.

The experience of the ninth round brought out the need for trying out variations in concepts and definitions, especially the reference period. The NSS Programme Committee which consisted of expert economists and statisticians recommended that in the tenth round of NSS which covered the first half of the year 1956, a reference period of one day should be adopted. Accordingly the reference day was the day preceding the day of enquiry. A person was treated as employed if he worked at least one hour on the reference day. It was also indicated in the instructions to the field workers that a person who was compelled to abstain from work on the reference day because of reasons such as illness, injury, holiday for his enterprise or office and such other personal or unforeseen reasons in the absence of which he would have worked, was to be treated as employed. A person, who did not work on the reference day because of lack of work even though he was on the look out for work, was to be treated as unemployed. The rest are persons not in the labour force. The figures obtained in the tenth round revealed that the percentage of employed was lower than the figures shown by the ninth round based on usual status. On the other hand, the percentage of unemployed was more in the tenth round than in the ninth round. Although the classification of persons into the categories employed, unemployed and not in the labour force, obtained in the tenth round was not strictly comparable with the figures of the ninth round, the labour time disposition details being based on the actual time spent on work during the reference week could be compared between the two rounds.

In the eleventh and the twelfth rounds, priority was given to agricultural labour enquiry. The two rounds together covered a period of one year. The reference period for the enquiry was the seven days immediately preceding the day of enquiry. The questionnaires were separate for agricultural labour households and other households. Only some of the basic classifications were comparable. Hence, a detailed discussion of the results of these two rounds is not attempted here.

The thirteenth round of NSS conducted the employment and unemployment survey only in the urban areas. The fourteenth round covered both the rural and the urban areas. A reference period of one week immediately preceding the day of enquiry was used. The employment and unemployment survey in the fourteenth round was spread over a full year. This was particularly important because figures of employment and unemployment based on a reference period of one week are likely to be influenced by seasonal variations. Only if the samples are uniformly spread over time during a whole year, the effects of seasonality will be averaged out. The figures provided by the fourteenth round were found to lie between the figures of the ninth and the tenth rounds as regards employment as well as unemployment are concerned. But in the case of the employed, the ninth round figures were larger than those of the fourteenth round; unemployment obtained in the fourteenth round was, however, higher than in the ninth round. The distribution of persons according to the number of hours worked during the reference week was obtained and compared with the results of the ninth and the tenth rounds.

After the fourteenth round, the NSS continued the employment and the unemployment surveys for several years more without any major modifications in concepts, definitions, and procedures. A major deviation was made only in the 27<sup>th</sup> round of the survey which was done during the year 1972-'73. By that time the NSS came to a decision to concentrate on one subject in a particular round. Surveys on important subjects would be repeated once in five years. Thus, the 27<sup>th</sup> round concentrated on employment and unemployment.

The survey in the 27<sup>th</sup> round adopted the usual status approach, the weekly status approach, and the daily status approach. As mentioned earlier, usual status was defined as the principal activity status during the 365 days immediately preceding the day of enquiry. Of the many activity statuses applicable to a person during the reference period of one year that particular activity status which was applicable to him for the longest part of the reference period was treated as the principal status. This was applicable to employed, unemployed, and 'not in the labour force' statuses.

When the reference week is used, a scale of priority was followed by which employment gets priority over the statuses of unemployed and not in the labour force and unemployment gets priority over not in the labour force. In case a person had two or more statuses of employment, the particular status on which he spent the largest duration of time during the week was used for classifying him. Similar scale of priority was used in the case of the reference day also, although the daily status was not seen used for classifying persons according to activity status. Table 4.1 gives the percentage of employed, unemployed and 'persons not in the labour force', obtained from the 32<sup>nd</sup>, 38<sup>th</sup>, 43<sup>rd</sup>, and 45<sup>th</sup> to 50<sup>th</sup> rounds of the NSS.

The above tables bring out a number of interesting aspects of employment and unemployment in India.

1. In rural areas, in the case of males, the percentage of employed obtained by using the usual status considering all activities is a little higher (between one and two percent more) than the corresponding percentage obtained by using the usual principal status. In the case of women, the difference is considerably higher (five to six percent). This shows that even though most women may have the principal status in the category 'not in the labour force', many of them do also participate in productive work.
2. In the urban areas, the trend is similar but the differences in the estimates according to the three different approaches are proportionately much lower in the case of the female population.
3. In the case of the estimates of unemployment, the trend is found to be the reverse. In the rural areas, among males, the usual principal status data show a slightly higher proportion of the unemployed than what is shown by the usual all-status-based classification. The weekly status gives a figure which is nearly twice the usual status figure. The trends in unemployment are similar in the case of women also; but the difference between the usual status estimates and the weekly status estimates is even higher (nearly three to five times).

**Table 4.1 Percentage of persons employed and unemployed under different reference periods: Kerala**

**Rural**

NSS Round (and year)	Male			Female
	usual principal	usual all	weekly status	usual principal
<b>a. employed</b>				
50(1993-94)	53.80	55.30	53.10	23.40
49(1993)	53.20	54.20	52.70	24.30
48(1992)	54.10	55.60	53.60	25.00
47(1991)	53.80	54.60	53.40	24.40
46(1990-91)	54.20	55.30	53.50	24.20
45(1989-90)	53.70	54.80	52.80	25.20
43(1987-88)	51.70	53.90	50.40	24.50
38(1983)	52.80	54.70	51.10	24.80
32(1977-78)	53.70	55.20	51.90	24.80
<b>b. unemployed</b>				
50(1993-94)	1.10	0.80	1.70	0.30
49(1993)	0.90	0.70	1.10	0.20
48(1992)	0.90	0.70	1.20	0.30
47(1991)	1.00	0.90	1.20	0.30
46(1990-91)	0.70	0.60	1.20	0.10
45(1989-90)	0.90	0.70	1.30	0.20
43(1987-88)	1.50	1.00	2.20	0.90
38(1983)	1.20	0.80	2.00	0.40
32(1977-78)	1.20	0.70	1.90	1.40

**Table 4.2 Percentage of persons employed and unemployed under different reference periods: Kerala**

**Urban**

NSS Round (and year)	Male				F
	usual principal	usual all	weekly status	usual prin	
<b>a. employed</b>					
50(1993-94)	51.30	52.10	51.10	12.1	
49(1993)	50.60	50.90	50.40	11.3	
48(1992)	50.20	50.70	50.10	12.5	
47(1991)	51.10	51.60	50.90	12.0	
46(1990-91)	50.80	51.30	50.60	12.3	
45(1989-90)	50.10	51.20	50.30	12.4	
43(1987-88)	49.60	50.60	49.20	11.8	
38(1983)	50.00	51.20	49.20	12.0	
32(1977-78)	49.70	50.80	49.00	12.3	
<b>b. unemployed</b>					
50(1996)	2.40	2.20	2.80	1.10	
49(1993)	2.00	1.90	2.30	0.50	
48(1992)	2.40	2.30	2.40	0.90	
47(1991)	2.40	2.20	2.60	0.70	
46 (1990-91)	2.40	2.40	2.70	0.07	
45(1989-90)	2.30	2.10	2.40	0.05	
43(1987-88)	3.20	2.80	3.50	1.10	
38(1983)	3.10	2.70	3.50	0.09	
32(1977-78)	3.40	2.90	3.70	2.70	

4. Similar trends are seen in the urban areas also, although the differences between the estimates based on the different approaches are much smaller.
5. When the proportion of persons in the labour force is examined, the differences are found to be smoothed out considerably both in the rural and the urban areas.

### Underemployment

The approach of the NSS with regard to measurement of underemployment is clear from the following extracts from the report of the Employment Survey conducted in the 50<sup>th</sup> round.

- 1 Underemployment is commonly defined as under-utilisation of the labour time of the workers. Some of the persons categorised as usually employed, do not have work throughout the year due to seasonality or otherwise and their labour time is not fully utilised. They are, therefore, underemployed. Their underemployment is termed visible underemployment if they report themselves to be available for additional work. The NSS measures visible underemployment by cross classifying persons by their usual and current statuses, and their current weekly status and current daily status.
- 2 Some employed persons, particularly the self-employed, may appear to work throughout the year. But in terms of productivity or income, the work they are pursuing may not be adequate. They may therefore look out for additional and/or alternative work in order to supplement their income. Such underemployment is termed as invisible underemployment which is not directly measurable. The NSS works out the indicators of invisible underemployment through a set of probing questions addressed to persons categorised as usually employed on their availability for additional work/ alternative work and the reason for seeking such additional /alternative work, status of their present engagement (i.e., whether worked more or less regularly), etc. The proportion of the usually employed who indicates their availability for additional/alternative work gives by and large, the magnitude of the invisibly underemployed.

### Underemployment among the usually employed

As mentioned earlier, some persons categorised as usually employed might not have work throughout the year. They might remain without work during some weeks of the year or go without work on some days of the different weeks of the year. The first dimension is brought out by the distribution of the usually employed by their current weekly status. Table 4.3 below gives the relevant results for the usually employed (in both the principal and subsidiary statuses) for the 38<sup>th</sup>, 43<sup>rd</sup>, and 50<sup>th</sup> rounds.

**Table 4.3 Percentage distribution of usually employed (principal and subsidiary) according to weekly status: Kerala**

Current weekly status	Rural			
	Male			199 50 <sup>th</sup>
	1993-94 50 <sup>th</sup> round	1987-88 43 <sup>rd</sup> round	1983 38 <sup>th</sup> round	
Employed	95.7	93.1	92.9	80.7
Unemployed	1.5	2.3	2.3	0.8
Not in labour force	2.8	4.6	4.8	17.9
All	100	100	100	100
Urban				
Employed	97.6	96.7	95.8	88.4
Unemployed	1.1	1.7	1.7	0.9
Not in labour force	1.2	1.6	2.6	10.7
All	100	100	100	100

The meaning of the figures in the above Table will be clear only if the weekly status concept is explained in detail. For classification of persons according to the current weekly status approach, they are assigned a unique activity status with reference to a period of seven days immediately preceding the date of enquiry. This is easily done in the case of persons having only one status during the reference week. But for persons pursuing more than one activity during the reference week, a priority-cum-major-time rule is applied to obtain a unique activity status. Under the priority rule, the status of working gets priority over the status of not working but seeking or available for work. Further, the status of not working but seeking or available for work gets priority over the status of not working and not seeking / available for work. Within the broad categories of working and not working, the detailed activity category was assigned by the criterion of major time. Using this procedure, in the current weekly status, a person is considered working or employed if the person was engaged for at least one hour on at least one day of the previous week on any economic activity. A person who had not worked even for one hour during the week but had been seeking or available for work at any time during the week was considered seeking/available for work. Others were considered as not available for work or out of labour force. For the employed (the working), besides the codes used for usual activity, four additional codes were used to reflect the weekly situation. These were the following:

1. did not work due to sickness, though there was work in household enterprise
2. did not work due to other reasons, though there was work in household enterprise
3. did not work due to sickness but had regular salaried/wage employment
4. did not work due to other reasons but had regular salaried/wage employment

For the unemployed the following were the codes:

1. sought work
2. did not seek but was available for work

For out of labour force one additional code was used

1. did not work due to sickness(for casual workers only)

Table 4.3 brings out the following aspects:

1. It is seen that in the rural areas, among the usually employed who were found to be 'not employed' during the week preceding the date of survey, the unemployment rate varied between 1.5 percent and 2.3 percent in the case of males. There was in fact a decline from 1983 to 1994. Similar trends are noticed in the case of rural females also.
2. In the urban areas also, the trends are very similar though the percentages are lower.

The significance of the above figures should be understood clearly. For example, it is seen that in 1993-'94, 1.5 percent of the rural males who were classified as employed according to the usual status concept (principal and subsidiary), were found to be unemployed during the reference week meaning that these persons were without any work and were seeking/available for work. This is the picture in an average week during the survey period. This is actually underemployment and it works out to the equivalent of 1.5 percent of the usually employed.

As in the case of the current weekly status, it will be useful to examine the concepts and definitions of employment and unemployment in the case of the current daily status also.

### **Current daily status**

The activity pattern of people, particularly in the unorganised sector, is such that a person might be pursuing more than one activity during a week and even during a day. In the current daily status, up to two activity statuses were assigned to a person on each day of the reference week. The unit of classification was, thus, half day in the current daily status. In assigning the activity status on a day, a person was considered working for the whole day if he had worked four hours or more during the day. If he had worked one hour

or more but less than four hours he was considered working or employed for half day irrespective of whether he was unemployed or not in the labour force for the remaining half day depending on whether he was seeking/available for work or not available for work. On the other hand, if a person was not engaged in any work even for one hour on the day but was seeking or available for work for four hours or more, he was considered unemployed for the whole day. If he was available for work for only less than four hours, he was considered unemployed for half day and not in the labour force for the remaining half day. A person who neither had any work to do nor was seeking or available for work even for half of the day was considered not in the labour force for the entire day and was assigned one or two non-economic activity status codes. The codes used for describing the various activity categories under current daily status are the same as those used for the current weekly status.

Table 4.4 gives the percentage of person days of persons employed according to current weekly status. In the rural areas, among the males who are classified employed according to the current weekly status, the equivalent of 2.6 percent was found to be unemployed. This figure is obtained by converting the full day and half day unemployment of the employed according to weekly status.

**Table 4.4 Percentage of person days of persons employed according to the current weekly status by their broad current daily status: Kerala**

Current daily status	Rural					
	Male			Female		
	1993-94	1987-88	1983	1993-94	1987-88	1983
Employed	94.9	99.5	94.1	81.9	94.5	87.1
Unemployed	2.6	0.4	3.8	2.1	2.6	4.2
Not in labour force	2.4	0.1	2.1	15.8	2.9	8.7
All	100	100	100	100	100	100
	Urban					
Employed	97.0	96.9	96.0	86.0	92.2	90.0
Unemployed	1.5	2.2	2.6	1.7	2.9	3.2
Not in labour force	1.3	0.9	1.4	12.2	4.9	6.8
All	100	100	100	100	100	100

The foregoing discussion enables us to quantify visible underemployment as a percentage of labour force. Although the percentages of underemployed are presented separately for the reference periods of current week and current day, the figures really represent the equivalents in terms of man year as percentage of labour force. There are also two components indicating the equivalents of time not available for productive work both during the current reference week and current reference day. These figures are all converted to their equivalents as percentages of labour force and presented in Table 4.5 below. The figures are presented separately for males and females in the rural and urban areas and also for the country as a whole.

**Table 4.5 Percentage of labour force according to usual status split into full employment, unemployment, and underemployment**

Components	Kerala				
	Rural			Urb	
	Male	female	persons	male	fem
1.labour force(usual)	56.10	33.00	44.88	54.30	16
2.employed (usual)	55.30	32.80	44.38	52.10	15
3.unemployed (usual)	0.80	0.20	0.51	2.20	1
4. employed(daily)	50.22	21.68	36.36	49.32	11
5. unemployed(weekly)	0.83	0.26	0.55	0.57	0
6. unemployed(daily)	1.38	0.56	0.98	0.76	0
7.not available for work(weekly)	1.55	6.07	3.74	0.68	1
8.not available for work(daily)	1.32	4.24	2.74	0.76	1

The percentage of employed (daily) in item 4 of the Table may be treated as fully working manpower, item 3 as unemployment, and items 5 and 6 as under-employment. When these figures are expressed as percentage of item 1 viz. labour force, a measure of the degree of visible unemployment and underemployment is obtained. The figures for all-India are given below.

Table 4.6 shows that the figures of unemployment and underemployment are by no means alarming. But the real problem, especially in the unorganised sector in the rural areas, is disguised underemployment and the NSS does not attempt to measure this phenomenon.

**Table 4.6 Employed, unemployed, and underemployed as % of labour force: All-India**

<b>Item</b>	<b>Male</b>	<b>Female</b>	<b>Persons</b>
1. Employed	89.85	66.52	82.23
2. Unemployed	2.07	1.39	1.85
3. Under employed	3.57	2.45	3.20
4. Not in labour force	4.51	29.64	12.73
Total labour force	100.00	100.00	100.00

There are also some emerging problems in the employment field, especially in educationally advanced States like Kerala. While highly qualified persons such as postgraduates in Arts and Sciences, degree-holders in Engineering and Technology and to some extent, even Medical graduates work in occupations for which they have the required qualifications, they receive remuneration far below the normal rates wages in such occupations. There is also the phenomenon in which highly qualified persons are forced by circumstances to take up jobs for which they are over-qualified. These are both the outcomes of the lack of proper manpower planning and proliferation of higher educational institutions, especially in Kerala and neighbouring States.

## 5. Conclusion

The usual status approach which has, implicit in it, a reference period of one year, provides an estimate of employment which is more or less an upper bound to the number of the employed. This is very close to that used in the censuses and the estimates from these two sources come quite close to each other. The percentages of the employed and unemployed do not differ significantly between the different approaches or different reference periods used. So it is preferable to use the usual status approach based on all occupations to make the basic classification of the population according to activity status.

In the case of unemployment also, it will be advisable to use the usual status approach. If the reference period of one week is used, the resulting figure of the unemployed would indicate the number of persons who remained idle during an average week in the survey period due to lack of work. Obviously the figure does not indicate the number of persons who face regular unemployment. Many of them are likely to be only underemployed persons. The labour force which is the number of persons available for productive work consists of the employed and the unemployed together. One of the main objectives of an employment and unemployment survey in a developing country with a substantially large unorganised sector of economic activity, should be to get a count of the number of persons who are attached to the labour force in the sense that they, either engage themselves in productive activities or are available for such work if work is made available.

As mentioned earlier, the estimate of labour force obtained by using the usual status gives almost the upper bound of the labour force. The next step is the study of the extent of visible underemployment experienced by these persons. Visible underemployment is the underemployment that is reflected in less than normal working hours during a specified reference period. This reference period should not be too long to influence the informant's memory or capacity to recall the actual time worked during the period. This condition automatically disqualifies the year and even the month as reference period. The day is too short as it is likely to be affected by chance factors. Thus, the week stands out as the only satisfactory reference period for ascertaining the actual time worked by the employed persons.

It is not possible to fix the number of hours in a week which a person should work in order to get himself classified as fully employed. Firstly, it depends on the sector of production or industry in which the person works. Industry is the branch of economic activity in which a person is engaged and it is determined on the basis of the end product of the establishment in which he works. Next, the normal hours of work for a person to be treated as fully employed during a given time period will depend also on the type of job or of function or of actual work which he does. For example, the normal working hours of a ploughman will be only five or six hours. For a factory worker it may be eight hours. For a doctor it may be only four or five hours. Therefore, there is no single figure of normal hours of work that is applicable to all workers. So, in order to estimate visible underemployment, it will be necessary first to work out normal working hours for each of a number of industry-occupation combinations.

All persons in an industry-occupation combination, whose actual hours of work during the reference week are equal to more than the normal working hours obtained as mentioned in the previous paragraph, will be treated as fully employed. The rest are underemployed.

The total underemployment may be calculated as follows:

1. calculate (normal weekly working hours minus actual hours worked during the week) for all underemployed persons.
2. Compare it with the normal weekly working hours for that industry occupation combination.
3. If the actual number of hours worked is equal to, or more than, the normal, the person is fully employed.
4. All those who work less than the normal number of hours will be treated as visibly underemployed, provided they report that they would have worked if work was available.



5. For each industry occupation combination, the sum of the difference between the normal and the actual hours of work for the visibly underemployed. This will give an aggregate measure of the time lost due to lack of work which may be termed visible underemployment.

The most difficult part in the measurement of visible underemployment, in the manner explained above, is the development of normal working hours for the industry occupation combinations. This has to be done through special intensive studies to be undertaken by well qualified persons with an understanding of the problem and with training in different field survey techniques. The size of the sample for such studies need not be very large.

### **Disguised underemployment**

Another aspect of underemployment, which the NSS or any other agency has not tried to tackle at an aggregate level, is disguised underemployment which is not reflected in the working hours of the persons concerned. But the problem is of significant dimension, in all types of self-employment in general and in agriculture and trade in particular, areas in which the self-employed persons spend apparently normal working hours but earn inadequate income or subnormal levels of produce. It is extremely difficult to ascertain the magnitude of disguised underemployment through routine sample surveys of the type usually undertaken by agencies such as the NSS. In self-employment in agriculture, for example, the efforts of the farmer for a period of about six months bear fruit only at the end of the period in cases of crop such as rice. One way of attempting to measure this phenomenon would be to study the operations in the total holding of the farmer, through an intensive farm management study which can bring out the net value of output less all costs including wage labour. The net value will be the share of the self-employed including household labour. Appropriate normal values of per capita output could be developed for different crop combinations and comparisons of the actual per capita output with these norms would enable an assessment of the extent of disguised underemployment. The main problem in making such an assessment is that the approach to be followed for this purpose would be different for different activities. For example, in the case of retail trade, it will be extremely difficult to ascertain the value added with a reasonable degree of reliability because, firstly, it will be hard to win the whole-hearted co-operation of the informant and secondly, in the absence of proper accounts on the transactions, even the trader himself may find it hard to supply the information.

It will be desirable to undertake a number of small scale 'type studies', as they may be called, in the different self-employment activities in which the possibility of significant disguised underemployment exists.

In Kerala, there are now, a large number of highly qualified persons working full time in occupations for which their qualifications are essential, for remuneration substantially lower than the market rates for comparable professions in the country. There are also cases of such highly qualified people being often forced by circumstances to work in occupations which require only lower qualifications and receiving the normal remuneration associated with such lower level occupations. Both these are due to excess supply of such personnel. The first and the foremost reason for this state of affairs is the earnest desire of the parents in Kerala to impart the best possible education to their wards. Earlier, such trained and educated manpower from Kerala was able find job opportunities in the rest of the country and in foreign countries. In course of time, the other States, particularly the southern States expanded the facilities for higher education. The effect was to dampen the Keralites' employment prospects in other States of India and to increase competition for job opportunities in other countries. The demand for such personnel has not increased significantly within Kerala except for the recent increase in opportunities in the information technology sector. The result has been surplus manpower in such highly qualified personnel in the State; in consequence, the rates of remuneration for such personnel in most establishments have come down. Even Government establishments are indirectly exploiting this situation. An instance in point is the practice of employing teachers particularly in higher secondary schools as 'guest teachers' on a piece rate basis for a specified number of hours per week.

No one seems to be worried about the plight of these unfortunate victims of circumstances. Even at the Government level, there is total absence of manpower planning. It is necessary to undertake a study to assess the extent of exploitation of these highly qualified personnel in the State.

To sum up, the following items of information should result from studies on employment and unemployment in the country.

1. Classification of the population into the three categories: employed, unemployed, and 'not in the labour force' based on the usual status according to principal and subsidiary statuses. Cross classifications of the above three categories with respect to age, education levels, industry, and occupation. This type of study may be conducted once in five years.
2. The number of underemployed persons facing visible underemployment and the equivalent total underemployment as a proportion of the labour force. This information may be collected as part of the study on employment and unemployment referred to above.
3. Disguised underemployment: A study may be undertaken at relatively long intervals (say, once in 10 years). The number of disguisedly underemployed according to economic activity and disguised underemployment as a proportion of labour force should be provided on the basis of such studies.
4. Underemployment of highly qualified personnel. Employment of highly qualified personnel in jobs appropriate to their qualifications but at rates of remuneration much lower than the standard rates is becoming widespread. There exists also the practice of employing highly qualified personnel working in occupations which require qualifications of a much lower level at rates of remuneration commensurate with the lower levels. Studies on these phenomena may be conducted once in five years.

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