

RURAL UNEMPLOYMENT IN PALAKKAD DISTRICT

**By
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DECLARATION

I hereby declare that this thesis entitled "**RURAL UNEMPLOYMENT IN PALAKKAD DISTRICT**" is a bonafide record of research work done by me during the course of research and that this thesis has not previously formed the basis for the award to me of any degree, diploma, associateship, fellowship or other similar title of any other University or Society.

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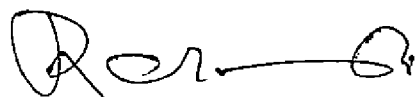
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Certified that this thesis entitled "RURAL UNEMPLOYMENT IN PALAKKAD DISTRICT" is a record of research work done independently by Mr. PRADEEP, K.S. under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to him.

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INTRODUCTION

INTRODUCTION

Employment is considered to be a social, economic, political and ethical necessity. The process of planned economic development aims at giving employment to everyone, besides achieving other socio-economic goals. Unemployment, which is a notorious social evil causes a series of problems in our times. A large number of unemployed persons becomes a potential source of danger to political stability as they are prone to be attracted to subversive elements in the society. Besides all this, the close relation between unemployment and poverty is well known. When an able-bodied person has no work to do, starvation stares him in the face. The rising incidence of unemployment has been one of the most distinguishing features of India's rural economy in recent years. Unemployment problem in India is closely related to increase in population. The supply of labour force has far exceeded the demand for it as a result of this rise in population. Besides, some recent studies revealed that due to modernisation of agriculture, there has been a sharp decline in the intensity of labour use in both agriculture and industry. This itself added a large number of persons in the rally of unemployed and casualisation of agriculture labour force in our country.

Though India has an outstanding record of some fortyfive years in development planning, the problems of unemployment and underemployment have grown in size and complexity. The various five year plans that were implemented in our country have failed to achieve the objective of full employment. On the contrary, with every successive implementation of plans, the percentage of unemployment has been increasing at an alarming rate. This is evident from the fact that, at the end of the First plan, unemployment as a percentage of total labour force was barely 2.9. By the end of the Third plan it rose to 4.5 per cent and now the estimates of planning commission based on the 43rd round of National Sample Survey for 1987-88 revealed the unemployment rate as high as 6.09 per cent. It also revealed that the estimate of unemployment was 12.43 million according to usual principal status, 15.30 million according to weekly status and 18.95 million according to daily status. As percentages of labour force, the rates of unemployment in 1987-88 works out to 3.77, 4.80 and 6.09 respectively for the three concepts. It should also be noted that the unemployment rates are much higher for the urban areas than for the rural areas and also higher for women than for men. For instance, usual principal status unemployment rate was 6.56 percent for urban areas as compared to only 3.07 per cent for rural areas. Similarly, usual principal status was 3.52 for rural females as against 2.87 per cent for rural males (Planning Commission 1990).

According to Centre for Monitoring Indian Economy's (CMIE) basic statistics relating to Indian economy, the rate of educated unemployment is also on an increasing trend. The number of educated unemployed increased from 5.9 lakhs in 1961 to 22.96 lakhs in 1971; further to 90.18 lakhs in 1981 and it reached 211.07 lakhs in 1990. It is also seen that even though there is an absolute increase among the unemployed in all categories, the compound rate of increase among graduates and post graduates was faster than that among matriculates. The proportion of matriculates among the total educated unemployed decreased from 78.5 per cent in 1961 to 58.4 per cent in 1990, while the percentage of graduates and postgraduates showed an increasing trend i.e., from 9.5 per cent in 1961 to 17.2 per cent in 1990. It can also be seen that there is a sharp increase in the number of unskilled manual labourers over the period i.e., 12.43 lakhs in 1961 to 136.29 lakhs in 1990. (CMIE 1992).

The case of Kerala

Kerala's experience in development with high magnitude on quality of life has been widely discussed all over the world. Kerala has full literacy level, low birth rate and death rate, good male female ratio, low infant mortality and other physical qualities of life which are comparable with any developed country in the world. However the unemployment problem in Kerala is the most acute among the

Indian states. Kerala has the highest incidence of unemployment both for male and female and in rural as well as urban areas among the Indian states. Based on the 43rd round of National Sample Survey estimates, the lowest unemployment rate of Kerala is seen among rural males with 12.5 per cent as against a corresponding all India average of 2.8 per cent. The severity is most acute among urban females of Kerala in whose case it rises as high as 40.3 per cent as against 12 per cent for the country as a whole. The unemployment of rural females accounts for 25 per cent and that of urban males accounts for 14.1 per cent as against the national average of 3.5 per cent and 6.1 per cent respectively.

If we analyse the nature and composition of unemployment, we can see a perfect dominance of educated unemployment. Kerala has the highest unemployment rate of the educated by male-female as well as rural-urban categories among the Indian states. For rural males the value is 26.9 per cent and for rural females it is 57.0 per cent as against the all India average of 11.5 per cent and 34.9 per cent respectively. Looking into the urban educated unemployment, it is 17.9 per cent for male and 41.7 per cent for female as against the national average of 6.3 per cent and 21.9 per cent respectively.

Apart from the problem of the educated unemployed, two other distinguishing aspects of Kerala's unemployment also need to be mentioned. First refers to the equally high incidence of unemployment among the non-educated people. The report of the survey on socio-economic conditions of agricultural and other rural labourers in Kerala by Government of Kerala (1985) showed that over the years the average number of days worked per year has declined for all rural labours and particularly the agricultural labour categories since 1964-65. The average number of days worked by agricultural labour and other rural labourers are 198 and 231 for males and 165 and 222 for females in 1964-65 and it got reduced drastically to 147 and 182 for males and 115 and 186 for females in 1983-84. Apparently, this seems to contradict the reportedly widespread scarcity of labour for agricultural operations and the high wage rate that is prevailing in the state compared to other states in the country. Another important feature of the employment pattern of Kerala is the relatively high proportion of casual labours among the male work force. Casual labour comprises 45.1 per cent of the usually employed rural males and 27.4 per cent of the urban males as against 32.1 per cent and 14.6 per cent respectively for the country as a whole. This is the highest among Indian states.

Objective of the study

The study is intended to assess the magnitude of unemployment of various types and to bring out a detailed socio-economic profile of the unemployed. The specific objectives are :

1. To study the activity status of each member of the households
2. To determine the nature and extent of employment and income of those employed
3. To determine the kind and extent of unemployment of those unemployed
4. To evaluate the relationship between employment/unemployment and levels of education, land holdings, caste, sex, attitude to work etc.
5. To evaluate the relationship between family income and incidence of unemployment

Scope of the study

The problem of unemployment, especially of rural unemployment is accepted as a major problem of underdeveloped countries. India provides a classic case of rural unemployment, particularly under-employment among the farmers. With the progress of planning in India, we are coming more and more not only to recognize the existence of this problem but also to devise ways and means for tackling it. Unfortunately, no quantitative estimate

of a direct type has yet been made regarding the extent of the phenomenon of unemployment in rural areas. Rural unemployment will provide a clue to the waste of labour resources in agriculture and the extent of industrialisation necessary to divert this waste to productive and beneficial activities. The technical training, vocational education and simple mechanical implements necessary to set up cottage industries to engage this labour can be predicted from figures of rural unemployment.

Limitations of the study

This study is based on the primary data collected from Palakkad district. Since the respondents did not maintain any written account, the data had to be collected by recall. Every effort was made to minimise the bias by including in the interview schedule, questions that facilitated cross checking. Since the study was restricted to only one district and to a limited number of respondents on account of constraints of time, caution has to be exercised while using the results of the study for policy decisions in other areas.

Organisation of thesis

The thesis consists of six chapters including this present introductory chapter. The second chapter deals with the important concepts relevant to the present study

besides reviewing important past studies on the subject. The third chapter deals with the description of study area and the fourth chapter gives the methodology and units of measurements used for the analysis. In the fifth chapter the results and the discussions of the findings are incorporated. The last chapter summarises the findings of the study followed by references and abstract.

REVIEW OF THE LITERATURE

In this chapter an attempt has been made to review important past studies relevant to the present study. This has been done mainly on the basis of the various concepts regarding employment and unemployment. The reviews of past studies will help to understand the different variables that can be used for the study and to compare the results obtained in the study. The rate of employment and unemployment varies with the different concepts used for the study, so it is necessary to select a particular concept for measuring employment and unemployment which is appropriate and suitable for the study area. Hence, it is essential to understand the various concepts used by previous authors and agencies for their studies which will help to reach a particular method for measurement of employment and unemployment.

2.1 CONCEPTS

2.1.1 Employment

Bishnoi (1966) defined employment as a state of being engaged in productive work.

Smith (1976) defined employment as a state in which a person combines his (or) her physical and/or mental efforts with other resources including other human efforts in a production process.

According to Morly (1977) the concept of employment given by Sen suffered from ambiguities in the sense that (i) it implicitly referred to a particular type of economic or social organisation (ii) it was implicitly aligned with certain aims of general policy or development (iii) it ignored the heterogeneity of labour force (iv) it allowed individual fallacy. He further suggested that employment should be defined in terms of work, as employment is only the interpretation within a given social and institutional frame work of the basic action of work which has two features viz(i) it is perceived as duty (ii) it should yield satisfaction.

Jain (1983) defined employment in daily status as, a person who worked at least for one hour but less than four hours is considered to have employed for half a day. If he worked for four hours or more during a day, he is considered as employed for the whole day.

According to National Sample Survey Organisation (1987) persons engaged in any gainful activity are considered as employed. Gainful activity is the activity pursued by persons for pay, profit or family gain or in other words, the activity which adds value to the national product.

According to Doss *et al.* (1988) the "employed" comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories.

(a) "paid employment"

(1) "at work" : persons who during the reference period performed some work for wage or salary in cash or kind

(2) "with a job but not at work" : persons who, having already worked in their present job were temporarily not at work during the reference period and had a formal attachment to their job. This formal job attachment should be determined in the light of national circumstances, according to one or more of the following criteria.

(i) The continued receipt of wage or salary; (ii) an assurance of return to work following the end of the contingency, or an agreement as to the date of return (iii) the elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligation to accept other jobs.

(b) "Self-employment"

1. "at work" persons who during the reference period performed some work for profit or family gain, in cash or kind

2. "with an enterprise but not at work" persons with an enterprise, which may be a business enterprise, a farm or a service undertaking who were temporarily not at work during the reference period for any specific reason
3. For operational purposes, the notion of "some work" may be interpreted as work for at least one hour
4. Persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, education in economic activity, temporary disorganisation or suspension of work due to such reasons as bad weather, mechanical or electrical breakdown or shortage of raw materials or fuels, or other temporary absence with or without leave should be considered paid employment provided they had a formal job attachment.

In this study the definition given by Doss *et al.* (1988) is accepted. But the period of study is chosen as one year.

2.1.2 Full Employment

Lerner (1951) defined full employment as the condition where those who want to work at the prevailing wage rate can find work without undue difficulty.

Pandey (1957) in his study on the pattern of agricultural labour in Uttar Pradesh stated that a man was considered fully employed if the total hours worked by him were not less than the total hours he was available for gainful work during the reference period. If a member of the labour force was with job but not at work because of personal reasons such as sickness and was not available for work, he would be considered fully employed.

Bishnoi (1966) observed that employment is a state of being engaged in productive work and continuous engagement in such work with sufficient amount of labour put in and an adequate reward flowing from it constitutes full employment.

Shah (1966) expressed that objective norms of full employment in agriculture could be adopted as the one used in other occupations. For instance, under the factories act, industrial workers are entitled in a year for 52 weekly holidays plus three paid holidays of national importance. In addition they are entitled for paid leave for 15 days. In other words, the working period in a year consisted of 295 days which might be adopted as a full employment.

Goswami and Bora (1970) viewed three hundred days of eight hour man day as full employment on the assumption that workers would get one holiday for each week and 13 days for sickness and other works in a year.

Vivekanand (1981) viewed that if a person is employed during the preceding year for 300 days or more, he can be considered as fully employed.

Sankar (1985) opined that if a person is employed during the preceding year for 300 days or more, he can be considered as fully employed.

Here 300 days of eight hour mandays is assumed as full employment norm and if a person is employed during the period of study for 300 days or more is considered as fully employed.

2.1.3 Unemployment

Keynes (1936) regarded unemployment as a situation where there was not enough work for those willing to work at the prevailing wage rate.

Telang (1954) defined unemployed person as a person who is capable of doing work, is without work and is in search of work, therefore obviously exclude those persons

that are voluntarily unemployed as also those who are with a job .but are temporarily not doing any job for some specific reasons.

International Labour Organisation (1963) conducted a survey of employment, unemployment and underemployment in Ceylon and defined the unemployed as person aged 12 years and above whose main activity status was either (a) without work but available and willing to work or (b) without any substantive work or duties though able to work or take duties whole time. Persons who were engaged in non-economic activities (domestic, study etc) but looking for work were also taken into account.

According to Singh (1972) a person who reported unemployed throughout the reference week or that he/she was seeking employment, was unemployed.

Rao (1973) in his paper on measurement of rural unemployment followed the distinction between employment as a means of creating income and employment as a vehicle of income distribution, defined two concepts of unemployment viz. production unemployed and income unemployed. Rao defined production unemployed as that group of people whose removal to another planet would not effect the output level of the sector from where they came. The income unemployed are that group of people who receive income only on condition that they work and who failed to get any work.

The income unemployed are therefore that group of people whose receipt of income is conditional on work. Rao further argues that income unemployed tends to be a subset of the production unemployed and underemployed in the rural areas.

Rajkrishna (1973a) defined unemployment as the difference between the labour force (the supply of labour) and employment (The demand for labour). The supply was the product of the population and the participation rate, where demand is treated as the product of capital stock and the labour intensity (or the labour capital ratio) which was reciprocal to capital intensity.

Dantwala (1975) defined unemployed as those without work and seeking and/or available for work.

Raj (1976) defined unemployment as a state of being without fruitful work and the perception of fruitfulness of the work to a large extent is a result of social conditioning.

According to Varma (1979) the concept of openly unemployed referred to those who were without work during a specific reference period, but were seeking job. This might include people who were not seeking work in the belief that no opportunity was available, but who were available for work.

According to Jain (1983), a person is treated as unemployed if he did not find even an hour of job during the survey week and is searching for an available work under weekly status.

Lynch's (1983) definition of unemployment included all those who stated during interview that they were looking for work regardless of whether they were registered as unemployed.

According to Sankar (1985) a person who remains without any productive work during the preceding year although he was available for gainful work is considered unemployed.

National Sample Survey Organisation (1987) defined unemployed as persons who, owing to lack of work had not worked but either sought work through employment exchanges, intermediaries, friends or relatives or by making applications, to prospective employers or expressed their willingness or availability for work under the prevailing conditions of work and remuneration.

According to Doss *et al.* (1988) unemployed comprise of all persons above a specified age who during the reference period are:

- (a) "without work" i.e., were not in paid employment or self-employment
- (b) "Currently available for work" i.e., were available for paid employment or self-employment during the reference period
- (c) "Seeking work" i.e., had taken specific steps in a specified recent period to seek paid employment or self employment

Here, the unemployed are regarded as all persons between a specific age limit i.e., 15 to 60 years, who are seeking and are currently available for work, but without work even for a single day for a specific reference period of one year. This might also include people who are not seeking work in the belief that no opportunity is available but are available for work.

2.1.4 Underemployment

Pande (1954) opined that if the number of total hours available for gainful work during the reference period was greater than the number of total hours worked by a member of the labour force, the member was considered under-employed.

According to Telang (1954) underemployment can be classified into three categories. The first is visible underemployment defined as: a visibly underemployed person

is a person capable of doing work and who obtains work for some time during a specified period but who is without work for some period and is in search of work at that time. The second type would be what might be called disguised underemployment. This include the category of persons whose employment for a particular period is not really necessary. The third type of underemployment is potential underemployment. The potentially underemployed person is unemployed for a certain period because he is not using modern tools in carrying out his work.

Gill (1960) defined underemployment as a situation in which the withdrawal of a certain quantity of the factor labour to other uses will not appreciably diminish the total output of the sector from which it is withdrawn. This is as much as to say that the marginal productivities of these units of the factor labour in their original employment is zero or very close to zero.

According to Bhattacharjee (1961) underemployment is a more comprehensive concept and refers to the unutilized portion of the selfemployed and family manpower to the farmers. There are two causes for this less than full utilization. On the one hand there is the special nature of agricultural production requiring seasonally fluctuating loads of work that cannot even with the best of management by the farm family be evened out. The inevitable result is

seasonal underemployment. Apart from this there is a certain proportion of available labour that is required and utilized through out the year. This portion can be equated with disguised underemployment part of which is equal to removable surplus of manpower.

The ninth International conference of labour statisticians (1964) suggested the following definition. Underemployment exist when persons in employment who are not working full time would be able and willing to do more work than they are actually performing when the income or productivity of persons in employment would be raised, if they worked under improved conditions of production or transferred to another occupation account being taken of their occupational skills. Underemployment appears in various forms, some of which can be measured with reasonable accuracy by means of statistical inquiries. The following major categories of underemployment may be distinguished

Visible underemployment: which involves shorter than normal periods of work and which is characteristic of persons involuntarily working part-time.

Invisible underemployment: which is characteristic of persons whose working time is not abnormally reduced but whose earning are abnormally low or whose jobs do not

permit full use of their capacities or skills (some times called disguised underemployment) or who are employed in establishments or economic units whose productivity is abnormally low (sometimes called potential underemployment)

Mitra (1972) viewed underemployment as a phenomenon where, though all the workers appeared to be engaged fully in agricultural operation during the normal busy season, some or all of them might be partially employed and a few dispensable.

Ahuja (1973) defined underemployment, while studying agricultural underemployment as simply the difference between the availability and requirement of labour.

Bhattacharya (1974) characterised rural underemployment as a condition under which the worker would be willing to work for larger hours or more intensively for a higher income but, could not have opportunity of doing so, due to the absence of opportunities for work and earnings.

According to Rajkrishna (1973b) there are four major criteria based on which a person may be called unemployed or underemployed. A person may be called unemployed or underemployed if either (a) he was gainfully occupied during the year for a number of hours or day less than some normal or optimal hours or days, defined as full employment

hours or days (b) he earned an income per year less than some desirable minimum or (c) he was willing to do more work than he was doing at present and he may be actually searching for more work or be available for more work, if it was offered on terms to which he is accustomed and finally (d) he was removable from his present employment in the sense that his contribution to output was less than some normal production.

Shah and Srikantiah (1976) defined underemployment as inadequate employment in terms of (a) those employed but not gainfully employed to get an average wage (b) those employed but not gainfully in the sense of low productivity and those meaning underemployment with reference to work sharing, work spreading and work slackening

Ghosh (1983) defined underemployment as a condition of working with low intensity, with lower productivity and lower income when compared with the potential level.

According to Sankar (1985) a person is considered under employed, if he is employed during the preceding year for a period less than 300 days.

According to Doss *et al.* (1988) persons visibly underemployed comprise all persons in paid or self employment, whether at work or not at work, involuntarily

working less than the normal duration of work determined for the activity, who were seeking or available for additional work during the reference period.

According to Bhatia (1990), if a member of a farm household finds work on the field for one or two days in a week or for a few weeks in a year, he is suffering from underemployment and not from unemployment in the ordinarily accepted sense of terms.

In this study underemployment is defined as a condition under which the workers are willing to work for larger hours or more intensively for a higher income but could not have opportunity of doing so due to the absence of opportunities for work and earning. But the numerical measurement of underemployment is taken as those who had worked for less than full employment norms of 300 days.

2.1.5 Disguised unemployment

Joan Robinson (1936) coined the term disguised unemployment and she defined disguised unemployment as the adoption of inferior jobs by the workers laid off from their normal jobs due to lack of effective demand during depressions.

Dantwala (1953) defined disguisedly unemployed as those who work on their own account and who are so numerous

relative to the resources with which they work, that if a number of them were withdrawn for work in other sectors of the economy, the total output of the sector from which they are withdrawn would not be diminished even though no significant reorganisation and no significant substitution of capital occurred in this sector.

According to Roserstein-Rodan (1957) disguised unemployment is that amount of population in agriculture which can be removed from it without any change in the method of cultivation, without leading to any reduction in output.

Viner(1957) defined disguised unemployment in terms of marginal productivity of labour. According to him the term disguised unemployment is commonly used to designate a situation in which the removal from a working combination of factor, of some units of labour, nothing else of consequence or worth mentioning being changed, will leave, the aggregate product of the working combination unchanged and may even increase it. To say that there is disguised unemployment is therefore equivalent to saying that the marginal productivity of labour is zero or almost zero and may even be negative.

Mandal (1966) defined disguised unemployment as the nominal employment with little contribution to

productivity. It was a state of economy whose marginal productivity of labour would be zero and from which, therefore a part of labour force could be withdrawn without reduction of output even in the present state of technology. It indicates a state of economy where self employment is pushed as far as to lower the self wage below the marginal wage.

Mehmet (1971) defined disguised unemployment in the sense of marginal product being less than the subsistence real wage rate, the minimum necessary for sheer existence. It implies that disguised unemployment may consist of two parts, one characterised by marginal product equal zero and the other characterised by greater than zero but less than the subsistence wage rate.

Uppal (1973) argues that Robinson's concept of disguised unemployment has only limited relevance for underdeveloped countries, because it is a cyclical phenomenon and disguised unemployed worker can at least identify himself and is aware of his state of underemployment and when he is able, will resume work suited to his training and skill.

In this study disguised unemployment is defined as the nominal employment with no contribution to productivity. Here the marginal productivity of labour is zero and therefore it could be possible to withdraw a part of the labour force without reduction in output.

2.1.6 Labour force

Gupta (1974) defined labour force or the economically active population consisting of the employed and the unemployed persons seeking work for first time or employed before but out of job, and also include unpaid family workers.

According to Indian Council of Social Science Research (1976) labour force is defined to include all persons classified as economically active i.e; those who actually supply effort for the production of goods and services for exchange (the employed or workers) and those who, though not working, want to do so (the unemployed), including the new entrants into the labour force or persons who seek work for the first time.

According to Hadstones and Mastrianna (1982) total labour force included those who are working and seeking work. Thus it included unemployed and employed. It however excluded all persons engaged exclusively in housework in their homes or attending school. Students are not members of labour force unless they work in addition to attending school.

Vivekanand (1981) defined labour force as all persons both male and female in the age group between 15 and 59 who may be regarded as eligible for employment. Students, disabled and mentally retarded may be excluded from the labour force.

Sankar (1985) included all persons both male and female belonging to the age group 15-59 years excluding students, disabled and mentally retarded under labour force.

National Sample Survey Organisation (1987) defined labour force as persons categorised as working (or employed) and categorised as seeking or available for work (or unemployed).

Here labour force is defined as the economically active population which is employed and the unemployed persons between the age group of 15 to 60 excluding students, disabled and mentally retarded persons. It also excludes persons who are not at all willing to do any work under any condition.

2.1.7 Gross income

Malya (1961) defined gross income as the sum total of the income received by all the members of the household from all sources, besides income from main occupation and dairy enterprises, rent received from leased out land, interest and remittance received.

Shah and Sing (1969) defined farmers income as gross inclusive of agricultural income from crop enterprises, non-agricultural income from the sale proceeds and rental

values of irrigation equipments, machinery and non-agricultural income from services, shop keeping rents and shares elsewhere.

Nandal (1972) defined gross income as consisting of three components, namely; (1) farm income which includes value of crop and livestock products, rent from leased out land, receipt from the sale of farm assets, custom hire service etc; (ii) non-farm income which includes the earning by services, earnings from the resources employed in the non-farm activities, receipts from the sale of non-agricultural assets, gifts etc. and (iii) borrowings received from institutional and non-institutional sources.

Mayappan (1976) stated that gross income included (i) total value of the products from crop enterprises and livestock enterprises; (ii) income received by hiring of pairs of draught animals, implements, machinery, sprayer and dusters, rent for leased out land, interest on money lent; (iii) Wages received for off-farm work; (iv) non-farm income from services, salary earnings and (v) trade etc.

Bhuvaneswari (1993) used a comprehensive definition of gross farm income as the aggregate values of all receipts of a farm in any accounting year without subtracting any cost incurred in earning it or incidental to the earning.

In this study the definition given by Nandal (1972) is accepted.

2.7.8 Net income

Misra (1961) arrived at the net income by deducting from the gross receipts, all the expenditure for cultivation, repairs and depreciation, cash and other costs of non-farm products, rents for the leased in land, land taxes and interest on production loans.

Meyappan (1976) defined net income as gross income minus expenses on crop enterprises livestock enterprises, permanent labour, non-farm products, rent paid for leased in land, taxes, land revenue, repairs and maintenance charges of buildings, wells, dead stock etc. and the interest on money borrowed.

Julk and Soni (1988) opined that the net household income is taken as the value of crop and dairy output produced during the year less the value of farm produce, feed to the livestock plus income from the sale of labour, fixing out of machinery and renting out land minus all actually paid out costs for inputs and depreciation.

In this study the definition given by Misra (1961) is accepted.

2.2 Review

Driver (1954) expressed the necessity of a very clear definition of unemployment when we try to measure it in rural areas of a country like our own. The measurement of

rural unemployment must cover workers of various categories and exclude only those who are either unemployable or voluntarily unemployed and who cannot be counted at all as part of the rural labour supply. Then he studied the unemployment and the seasonal variation in unemployment in four districts of Ahmedabad, Thane, Dharwar and Poona during the period of April 1952 to March 1953. It was found that the total unemployment was highest in Ahmedabad to the tune of 77 per cent and lowest in Dharwar district which was only 16.7 per cent.

Shiwalkar (1954) attempted to study the problem of employment of the people of the village Shiwal in Nimar district of Madhya Pradesh in the year 1945-46. The fundamental aim in conducting the enquiry was to find out the amount of labour available, avenues of employment, period of employment and the efficiency of labourers. The results showed that 67 per cent of the population was working, in which 10 per cent belongs to occasional workers. The most striking point in the study was the characteristic of seasonal fluctuation in the periodical demand for workers, there being over employment, fairly full employment and under employment varying in degrees from period to period.

Telang (1954) accept certain definitions of the term and suggested ways and means of obtaining statistically

reliable estimates of the number of persons affected by lack of employment opportunities and extent of unemployment. The data for the study were obtained from the Bureau of Economics and Statistics, Government of Bombay, relating to the rural areas of Bombay state during 1952. It was found that the visible underemployment was to the extent of five per cent during the slack agricultural seasons. Visible underemployment is also the highest in the case of non-agricultural workers and agricultural labourers.

Orlando (1955) considered two points of view of unemployment in agriculture. The first is the subjective point of view, from which the worker is examined outside of the cycle of production in which he takes part, leaving aside the nature of demand and its irregularities. The second is the objective point of view from which the conditions of employment and unemployment of the worker were examined in relation to the cycle of production or harvest year and therefore with regard to the typical discontinuity caused by its seasonal irregularity. To measure unemployment subjectively considered, it suffices to establish a state of previous employment and present unemployment of the worker at any one moment. Instead, to measure it objectively it is necessary to evaluate for all workers employed and not employed at given moments, the number of days of the entire cycle of production, during

which they remained on an average without work and relate it to their total working capacity.

Bhattacharjee (1961) attempted to analyse 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 south plain regions of Bihar. Underemployment on the farms was measured in terms of the unutilized 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 was estimated separately for each farm family through a man power budgeting approach, and broken down into its seasonal, disguised removable and disguised fractional components. The degree of total underemployment in 1957-58 amounted to approximately 56 per cent of the available supply of farm family labour and the seasonal underemployment amount to 23 and 27 per cent of the labour supply in the two samples under study. The disguised removable underemployment worked out to nine and 20 per cent in the two zones if only male workers were considered removable, but went upto 15 and 23 per cent respectively if both male and female workers were treated as removable. The balance of the degree of total underemployment constituted disguised underemployment in terms of fractional units of manpower.

Bishnoi (1966) studied the manpower utilization in a village in Rajasthan. The study also investigated and analysed the pattern of employment and the extent, nature and causes of unemployment in the village. Out of the total working population, 81 per cent was engaged in cultivation 5.9 per cent was labourers, 1.3 per cent in rural crafts, 1.0 per cent in service, 1.0 per cent in dairy farming, 1.8 per cent in other work and 8 per cent with no work. The result also showed that 32.7 per cent of the gainfully employed adult male population and 36.4 per cent of the adult female population were underemployed. It was also found that the underemployment was not only disguised but was also considerably seasonal in character.

After defining disguised unemployment as the nominal employment with little contribution to productivity, Mandal (1966) narrated three specific characteristics of disguised unemployment. Firstly, it is a concept which applies to selfemployment and therefore to a farm economy mainly dependent on selfemployment. The second character is that it indicates a state of economy whose marginal productivity of labour is zero and from which therefore, a part of labour force can be withdrawn without reduction of output even in the present state of technology. The third one is that, it indicates a state of economy where self employment is pushed so far as to lower the selfwage below the market wage.

Mehra (1966) worked out statewide estimates of surplus labour in agriculture as the difference between actual workforce on different size groups of holding (taken from 1961 census) and the labour required at the peak of agricultural operations (taken from the farm management survey data of 1956-57). The estimate thus arrived was treated as the maximal estimate. Because the requirement of workers on any farm cannot be a fraction, she added the number of farms to the size of required workforce and arrived at minimal estimate of surplus labour. The percentage of surplus was calculated by taking the mean of the maximal and minimal estimates. Her estimate for all India was 17.1 per cent. The study revealed wide interstate variation in the incidence of unemployment.

Srivastava (1966) studied the pattern of employment in agriculture with reference to wage structure in relation to the influence of urbanisation on a regional farm economy. The basic data for the study were collected during the agricultural year 1963-64 from three villages of Ranchi district in Bihar viz. Katachacha, Punchara and Batulahara. It was found that unemployment was highest in Katachacha village as compared to Punchara and Batulahara villages, largely because farming in this village is on subsistence level and the extent of labour employed on farm job is only about 38 per cent. It was still found that Punchara village had high wage rate because of its being situated in close vicinity to an urban centre.

Aulakh (1972) estimated underemployment using a different method. The study was conducted in five randomly selected villages of Verka block in Amritsar district of Punjab. The labour available on farms were converted into mandays, with the help of appropriate efficiency norms. Permanent hired labour was also included in the estimation of total annual labour availability. Labour requirements were estimated in the context of different cropping patterns and levels of farm technology in operation. Labour requirements were also worked out for crop enterprises and animal enterprises. It was found that the available supply of labour on the small size holdings was in excess of requirements by 27.83 per cent. In the medium sized farms the level was 5.9 per cent. In the case of large farms there was scarcity of labour to the tune of 21.54 per cent.

Khaund (1972) suggested an alternative criterion of measuring invisible unemployment in the farm family sector based on the hypothesis that the gap between nutritional requirements and nutritional supply varies in direct proportion with the gap between labour supply and labour requirement. Persons in the invisible category are unemployed not in terms of time units, but in the sense of efficiency or productivity. Disguised unemployment is in a sense a manifestation of labour inefficiency which is at once the cause and the effect of underemployment. According

to this criterion the estimate of underemployment was given by the difference between the actual and potential number of adult persons sustained by the available food supply in terms of nutritive value. The estimate thus given includes seasonal component of underemployment also. Subtracting the seasonal component from the total gives the magnitude of disguised unemployment.

Mitra (1972) attempted to measure the extent of underemployment surplus to see how the technological change brings in an increase in the demand for labour. The data used in his paper were from the studies in the economics of farm management, both under the first and second series of survey. It was observed that with the increase in the farm size, family labour input per standard acre decrease, whereas the output per standard acre remain more or less the same. The study revealed that there is considerable amount of underemployed surplus and with the increase in the farm size the proportion of this surplus decreases.

Rudra (1972) studied the seasonal variations in the demand for labour and its employment based on a random sample of 149 farming households of Hoogly district in West Bengal. The results showed that the seasonal pattern of employment is very largely determined by the seasonality of the main crop of the region. Employment of all human labour on farms and employment of family labour on farms as

well as outside farms, mark four humps in the year corresponding to the two sowing seasons and the two harvest seasons of the summer and winter paddy crops.

Sethuraman (1972) attempted to measure the extent of rural underemployment between seasons and regions. To do this he uses variations in wage rate of agricultural and non-agricultural labours. Assuming plausible values of elasticities of demand and supply of labour, such variation in wage rate between seasons and regions were translated into variations in the extent of unemployment at a predetermined wage rate. The data for the study were drawn from the fourteenth round (1958/59) of National Sample Survey.

Singh (1972) studied the degree of employment/underemployment of labour in rural areas and the factors influencing labour utilization. The data were collected from the workers belonging to 60 households in two villages viz. Bardiha and Ranideva, in Hassainabad block of Palamau district. The results showed that the completely unemployed persons constitute only a small portion of total population ie. only 2.15 per cent for males and 3.16 per cent for females. The average number of mandays worked by a male worker comes to 203.5 days in a year and the average number of employment per female worker was 125.3 days in a year. The analysis also showed that the main problem of

rural unemployment was one of under-utilization rather than of complete unemployment of workers.

Pal (1972) attempted to study the controversial issue of the simultaneous presence of a positive wage rate and a surplus labour force under a free price mechanism. The issue was studied in the light of the results of a case study of 79 farms in a village in West Bengal in May, 1970. On the basis of 79 observations relating to output per gross acre and mandays per acre a second degree function of the form $Y = a + b x + c x^2$ was set up showing the relationship between mandays per acre (x) and output per acre (y). $Y = 145.05 + 2.35 x - 0.003 x^2$ significant at one per cent level. The function indicates that the marginal productivity of a manday would be zero at 356th man day per acre. All the farms except three were well above the zero marginal productivity level. Thus from the analysis it was concluded that there is no surplus manpower in the village as a whole and the positive marginal productivity of labour vis-a-vis positive wage rate might be compatible with the existence of underutilized manpower.

Ahuja (1973) attempted to measure the extent of rural underemployment in Rajasthan. The availability of labour was obtained from the agricultural working force consisting of those persons classified as cultivators and agricultural labours, both in rural as well as urban areas in the

1971 census. The requirements of labour in agriculture were taken from the districtwise cropping pattern data for 1967-68. The labour coefficient was derived from the farm management studies of the Government of India. It was found that for Rajasthan as a whole there was only a marginal labour surplus, which was a little more than three per cent of the primary workforce. In the district wise statistics it was found that there was a wide variation in employment situation among the various districts.

Parthasarathy and Rao (1973) attempted to study the characteristics, poverty and the anatomy of unemployment among rural labour force in West Godavari district of Andhra Pradesh in 1972 by a three round household survey. The main characteristics of rural labour household include the relatively small size of household and a higher rate of female participation in work force. In kharif season only 1.8 per cent of the male workers worked for more than five months and none worked for less than one month. In the rabi season, the percentage employed for less than four months was larger among males. It was also found that only 35 per cent of the males and 50 per cent of the females were found to be fully employed during the peak.

Rajkrishna (1973) attempted to study unemployment and suggested that there were four major criteria according to which a person may be called unemployed or underemployed.

These are the time, income, willingness and the productivity criterion. He chose the income criterion as a good proxy for productivity criterion and attempted to measure the unemployment, on the basis of data relating to 487 male workers in four villages in Rajasthan. He defined workers who were gainfully occupied for less than 36 hours in the week as 'idle', workers earning an income of less than Rs.60 per month were defined as "poor" and workers who were willing to work more hours in the prevailing conditions were defined as willing. It was found that the poor (33 per cent) were clearly more numerous than the idle (28 per cent); and the idle more numerous than the willing (14 per cent). Less than a fifth of the poor and less than a third of the idle were willing to work more.

Rao (1973) examined the estimates of unemployment made by the census, 1961, and the National Sample Survey and argued that they probably under estimate unemployment and underemployment to a serious degree, mainly because these organisation underestimate the amount of labour force available for work. The author made some assumptions regarding availability and estimated the aggregate amount of unemployment and underemployment in the rural areas of the country. These estimates were then compared with some other estimates made by individual scholars.

Rath (1974) made an attempt to examine the changing picture of unemployment of agricultural labourers or the weaker sections, based on the Second Agricultural Labour Enquiry (1956-57) and the 25th round of National Sample Survey (1970-71). Analysis of the total time disposition of the adult males in the weaker section households in 1970-71 showed that only 5.7 per cent of their total unemployment is in seeking or being available for work, they were not available for work for 12.5 per cent of the time due to sickness etc. for about 82 per cent of their time, they were in gainful employment. With certain assumptions it was estimated that there was much lower percentage of unemployed time of the rural male labour force among the weaker sections in 1970-71 than in 1956-57. The author argued that it was largely due to different methods of measuring intensity of different activities and the findings of the 25th round of the National Sample Survey provide no basis to conclude that the rate of unemployment among weaker sections in rural India had declined by 1970-71.

In order to gain a better insight into the problems of poverty and unemployment Dantwala (1975) made a field investigation in 1972-73 covering 543 households made up of small farmers, farm labourers and artisans selected from three backward regions of south Gujarat, Bihar and eastern Uttar Pradesh. He found a close association between

occupation and caste in the area. In Bihar unemployment during the reference week was the highest (25.6 percent) among share - croppers and the lowest (7.1 per cent) among artisans. The incidence of unemployment among females was higher in Gujarat. The analysis in terms of occupation found that out of 100 persons who earned nothing during the week, 37 were agricultural labourers, 26 owner cultivators 23 were cultivator-cum-tenants and the rest belonged to other categories.

Bharadwaj and Dave (1976) estimated surplus labour time in the agricultural sector for the districts of Gujarat in 1970-71 on the basis of the deviation from the norm at the current level of technology and organisation. The results showed a mixed pattern of the surplus labour time for the various districts as well as for the state as a whole. Surplus varied from two per cent in Panchmahals to 44 per cent in Bulsar on the assumption of available labour days including cattle. For the state as a whole, the results varied from a marginal deficiency (-3 per cent) to nearly 10 per cent surplus depending upon the assumptions made.

Gulati (1976) analysed the report of the Indian Rural Labour Enquiry conducted in 1964-65 with particular reference to the incidence of unemployment among female agricultural labourers who constitute at least one third of

the total agricultural labour force. It was found from the results that the women were employed for 66 per cent of the number of days employed by men labourers. They got wage employment for an average of only 160 days. The analysis also showed a wide variation among the different states in the number of days employed by women labours.

Using data for Ferozepur district from the studies on the economics of farm management for 1967-68 to 1969-70 Mitra (1976) attempted to estimate the total surplus labour in agriculture to get an idea of how far agriculture provided employment to those who are fully engaged in it. The methodology used for estimating surplus labour was the difference between the quantity of labour that would flow from a working force when fully employed and the quantity of labour that is actually put in by the working force. It was found that about 20 per cent of the total was surplus labour in agriculture and it was also found that there was a wide variation in surplus labour over different seasons within the year.

Bardhan (1977) argued that any estimate of potential unemployment and underemployment using objective norms of time or productivity will remain incomplete and unusable for policy consideration, unless the organisational or institutional conditions associated with the norm are spell out along with what is implicitly required for transition

from the prevailing situation to the normative one. Organisational changes of the kind required for transforming the potential surplus into effective supply of labour, and for sustaining them in productive employment must be elaborated in terms of their feasibility within the prevailing and the projected socio-economic frame-work.

After a review of relevant research on the problem of unemployment in Indian agriculture, Chattopadhyay (1977) re-examined the surplus labour model using fresh results from disaggregated data for Assam. The volume of underemployment in agriculture is reviewed for various states using statistics from the Ministry of Agriculture. The paper proposed that surplus labour which constituted about 27 per cent of total male labour engaged in agriculture in West Bengal and 32 per cent in Assam should be removed into non-agricultural sector and non-agricultural occupations.

Hunafi (1978) calculated three ratios, input of permanent family labour to total labour input, input of permanent non-family labour to total labour input and input of temporary non-family labour to total labour input on the basis of data for 480 households in six provinces and involved in six different cropping patterns in Egypt. The ratios indicated that the function of labour input was more obvious for the temporary labour. Hours worked by women

and children had stronger seasonal fluctuation than those of men. It also indicated that seasonal unemployment did not present a serious problem for permanent labour.

Panikar (1978) describes a micro study of the levels of employment, income and food intake in Kainakary village in the Kuttanad region in Kerala. The agricultural labourers in Kuttanad face acute unemployment and underemployment. Open unemployment worked out at about 33 per cent of the labour force. In spite of comparatively high wage rate, total earnings among the sample families was less than half the per capita income of the state.

Quoting National Statistics, Krishnamurthy (1979) opined that areas of high unemployment are of relatively poor areas. At the all India level the person - day unemployment rates are much higher in poor households, and the rate declined as one proceeded up the scale of richer households. Households with per head monthly expenditure of less than Rs. 34 in 1972-73 had unemployment rates of over ten per cent compared to overall average of 8.2 per cent. Evidence from agroclimatic zones with high unemployment showed that areas with high unemployment were also areas with poor irrigation facilities and necessarily not areas of low land productivity.

Aiyasamy and Natarajan (1980) examined patterns of employment in Coimbatore taluk experiencing the impact of industrialization and urban growth. Unemployment in this region is very high. Out of 177 earners in sample households in agricultural sector, only 50 had employment for 200 days and more. The majority in the earner group experienced unemployment or underemployment at some point of time in the year.

Lal and Joneja (1980) studied the pattern of employment and unemployment in the marginal and small size groups of farmers in a village in Bichpura block of Agra district in Uttar Pradesh. The study showed that total unemployment was as high as 57.75 per cent in the marginal farm size group and that as farm size decreases unemployment increases.

Pathak and Shaw (1980) conducted a study to understand the nature and magnitude of poverty and unemployment for formulating and implementing a time bound action programme to the weaker households to cross the poverty line. The study was conducted in the Balasinar taluk of Khede district in Gujarat state during the period of 1977-78. The study revealed that the overall work participation rate of the population was 53 per cent and among this nine per cent of the workers were either severely underemployed or unemployed. The percentage of workers suffering from

severe underemployment was more or less the same for males and females. When the pattern of income distribution was considered for various occupational groups, it was found that a very large majority of the households of marginal farmers and agricultural labourers (89 per cent), rural artisans (82 per cent) and small farmers (73 per cent) were below the poverty line.

Sarma and Radhakrishna (1980) examined the unemployment situation in Gujarat based on the information given in the 19th round (July '64 - June '65) and the 27th round (October '72 - March '73) of the National Sample Survey. The results revealed that the labour force as a percentage of population slightly increased over time and the participation rate of females was much lower than that of males. It was also found that the magnitude of unemployment was much larger in rural areas than that in urban areas.

Singh and Ramanna (1981) attempted to explore the possibilities of generating additional employment in the agricultural sector. A sample of 64 respondents was selected comprising irrigated large, irrigated small, unirrigated large and unirrigated small farms, 16 from each category. For each average farm situation four optimum plans were developed using linear programming technique - optimum plans A and B at current production technology

and C and D at improved technology without and with borrowed funds respectively. The results revealed that the family labour of small and large farms suffered from under-employment in the existing plans. The magnitude of family labour unemployment could be minimized and the small and large farms could realize net gain in employment potential in successive optimum plans.

Acharya (1983) highlighted the need for the measurement of unemployment using the productivity criterion. It was showed that this criterion permits identification of the genesis of unemployment and of wasteful usage of time. An empirical exercise was also worked out to exhibit the application of this criterion, using data on 746 workers belonging to 188 agricultural households from a poor but a comparatively affluent region of India. This exercise showed that the large cleavage between poverty levels and estimates of unemployment based on time criterion definitions continued due to the existence of techno-economic systems of very low order in poor agrarian economies.

In order to provide gainful employment to the underemployed of India's agricultural sector, thus increasing the volume of production and improving standards of living, rural underemployment needs to be measured. Kushwaha and Thakur (1984) compared two methods of

estimation, the multi and unidimensional approach. In multidimensional approach all the four criteria based on which unemployment is measured viz time, income, willingness and productivity were used. Using multidimensional approach the extent of unemployment and underemployment in agrarian hill economy of Himachal Pradesh was estimated. Various criteria including size of holdings, seasonality of work, income availability, willingness to work, productivity of land, misemployment etc were considered. It was concluded that underemployment was highest on the smallest holding, seasonal unemployment was lowest on the marginal holdings and that on each size of holding the poorer land labourers made up the greatest percentage of unemployed.

Sharma (1985) found that the incidence of unemployment was greater among landless and marginal farmers, declining successively with increase in size of land holdings. The incidence of unemployment rises linearly with the level of education. A state wise analysis of the incidence of unemployment in relation to poverty clarifies that poverty and unemployment do not bear a linear relationship to one another and that they measure different phenomenon in diverse socio-economic situations.

Nayak and Chatterjee (1986) attempted to analyse and measure disguised unemployment/underemployment separately

by using all the five available criteria and tested empirically the difference in their results using data on employment status of 715 male workers in a poor and backward block of Orissa. The data were collected in 1982-83 by personal interview with pre-tested questionnaires from 250 households in five villages of Aul block in Cuttack district of Orissa. The main conclusion reached in the study was that there was widespread disguised unemployment/underemployment in the area and the rate differs significantly according to the criterion employed even if the same data were used.

Sankar (1985) in his study to understand the socio-economic conditions of agricultural labourers in Palghat district noted that 55.2 per cent of the population in the selected households constituted the potential labour force but only 49.4 per cent constituted the actual working force. It was also found that none of the workers was fully employed, 1.4 per cent of them was moderately underemployed and 98.6 per cent was severely under employed. The average level of underemployment for the sample as a whole was 66.37 per cent of the total available man days.

Prakash (1988) studied the relationship between economic development and changing structure of employment in Kerala. Kerala's development during the past-planning

period is associated with a structural change in which the tertiary sector emerged as the major sector of the state's economy. The analysis of the changing structure of employment suggests that among the three sectors, the sector which achieved the highest growth in the share of employment is the tertiary sector.

Reddy (1988) attempted to estimate surplus labour in Andhra Pradesh using the data from both supply and demand sides of the labour market. The labour supply for the reference period was arrived at by using the growth in labour force between 1971 and 1981 population census. The demand for labour was obtained from the Comprehensive Scheme for Studying the Cost of Cultivation of Principal Crops provided by the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India. The estimates were made for two periods-average of first two years ie. 1971-72 and 1972-73 and the last two years ie. 1976-77 and 1977-78, in order to make it convenient to compare the two points of time. The results indicated that there exists considerable amount of surplus labour in Andhra Pradesh agriculture and that the total surplus varied from 57 per cent in first period to 37 per cent in the second period at the state level.

Varghese (1989) studied the education-employment linkages in Kottayam and Palghat districts of Kerala using

the 1981 census figures. The results showed that education specially lower level education has more positive influence on the male work participation rates and almost a negative influence on the female work participation rates. On the other hand, university education has strikingly more positive influence on female work participation rates. The empirical evidence also showed that disparities (in terms of male - female, rural - urban etc) in educational levels of the workers are more pronounced in regions with lower levels of educational attainment.

Bhatia (1990) suggested that if the purpose is to identify the weakest among the unemployed for providing some unemployment reliefs, the time criterion is the best. For this the incidence of prevailing unemployment was collected for three types of cases viz. (1) those who remained unemployed throughout the reference year and did not have work even for one day in the year; (2) those who were unemployed for the week in which the survey was held and did not have even one hour's of work throughout the week and (3) those who were unemployed on an average during a day on the basis of the activities pursued by them on all the seven days of the reference week. This gives the usual or chronic status unemployed, the weekly status unemployed and the daily status unemployed.

Kainth (1990) argued that any analysis of the nature and magnitude of unemployment must take into account the socio-economic structure of the particular locality. He studied the nature of unemployment and the occupational pattern of job seekers in Punjab and found that the employment situation in the state is characterized by shortage of farm labour in the busy agricultural season; underemployment and some unemployment in the slack agricultural season; a fairly low level of female labour force participation; shift of educated youth from rural to urban areas in search of white collar jobs; and a significant incidence of unemployment among the educated including those having technical and professional qualifications.

Reddy (1991) estimated the surplus labour and its components using methodology derived from the studies of Radon (1957) Rudra (1973) and from other relevant studies. Three components of labour surplus were distinguished total surplus, removable surplus and seasonal surplus. Estimates were made for these components for the five region of Andhra Pradesh and for the state as a whole for four years (1971-72, 1972-73, 1976-77 and 1977-78). The study indicated surplus labour in the form of underemployment in Andhra Pradesh agriculture, although that varied considerably across the state. The magnitude of surplus labour had declined over the five year period, indicating the positive impact of new technology on labour demand.

Sing *et al.* (1991) aimed to identify the problems and prospects of employment and its relation to income generation and to measure unemployment and underemployment on the basis of labour earning per day required to provide a minimum level of living to the members of the family. Two districts in Uttar Pradesh were selected for the study as they have highest number of small and marginal farmers in the region. The potential for increasing income and employment in various farming systems depend on the magnitude of the combination of crop and other livestock enterprises. The findings suggest that family workers were in surplus and even the optimum use of resources could not generate sufficient family labour income to fulfil the minimum requirements to keep the family above the poverty line.

Visaria and Minhas (1991) analysed extensively data from the various rounds of National Sample Surveys and argued that in view of the resource crisis and other structural rigidities, the organised sector would be unable to provide a high growth rate of employment in the coming years. Therefore, a large majority of nearly 80 million persons who would join the labour force during 1990-2000, will have to find work as self-employed and casual workers.

Oommen (1992) studied the nature and magnitude of unemployment in Kerala, using the estimates of the National Sample Survey organisation in the 43rd round and the

employment exchange data. The study found that the lowest unemployment rate of Kerala is seen among rural males with 12.5 percent as against a corresponding all-India average of 28 per cent. The severity is most acute among urban females of Kerala in whose case it rises as high as 40.3 per cent as against 12 per cent for the country as a whole.

Ali (1993) examined the prevalence of higher rates of unemployment and underemployment in agriculture, particularly among the landless and small farmers and share croppers based on data collected over one year from a sample of 200 households living in a village in south western Bangladesh. When compared with the existing previous data from other parts of the country, growing rates of unemployment and underemployment in agriculture were apparent. Population pressure, landlessness, environmental constraints and technological changes in agriculture are some of the causes of unemployment in farming.

Pal (1993) attempted to measure temporal and regional variations in the level of unemployment in India using both the traditional measures and a set of new measures developed by the author which takes into account both intensity and distribution aspects of unemployment. The data for the analysis were obtained from the Indian National Sample Survey data on employment and unemployment

collected during its 32nd (July 1977 - June 1978) and 38th (January-December 1983) round. The main conclusions that emerge from the analysis were that all the measures of unemployment except PRU showed an increase in the level of unemployment in 1983 over 1977-78. The level of unemployment in rural sector was lower than in urban sector, but the contribution of the former towards total unemployment was very high.

Singh and Julkar's (1993) study aimed at examining the extent of employment and income per family per annum derived by agricultural labourers, small farmers and nonagricultural labourers and tested the hypothesis that agricultural/nonagricultural labourers were better off than the small farmers in the study area. A sample of 50 small farmers and an equal number of agricultural labourers and of non-agricultural labourers were selected in 1991-92 from Murar and Dabra blocks in Gwalior district of Madhya Pradesh for the purpose of the study through survey method. The study revealed that periods of unemployment were higher in the case of small farmers and agricultural labourers.

Thakur and Thakur (1993) studied the generally perceived idea of traditional agriculture in India which provides employment to many more people than necessary to produce a given level of output, and the problem of disguised unemployment or underemployment of the

traditional agricultural labourers and small cultivators who are working on small plots, contributing nothing to output. In this study a sample of 137 households in the low hill zone was selected to examine the return to scale and extent of disguised unemployment by size class of holdings. It was shown that on both marginal and small size holdings production was subjected to increasing return to scale and the marginal productivity of labour was positive which shows that there was no disguised unemployment in the sense of zero marginal productivity of labour on the selected farms.

Tripathi and Kunzru (1994) carried out a study in 12 villages of Bareilly district in Uttar Pradesh. Personal interviews were carried out on 192 randomly selected rural women dairy farmers. Data were collected on 14 independent variables in relation to three parameters to study overall employment status of rural women in dairying. Correlation analysis revealed that caste, adoption behaviour, input availability, risk orientation, management orientation and attitude towards dairy farming were negatively and significantly correlated whereas attitude towards employment and productivity of dairy animal were positively and significantly correlated with overall employment status of rural women.

Using National Sample Survey data from 1972-73 to 1987-88 Vaidyanathan (1994) attempted to study the changes in level and structure of employment, factors in growth of rural non-farm employment and the educated unemployment in the country. He argued that the unemployment situation in the country, be it in rural or urban areas had not worsened as in the 70's or 80's. There had in fact been a remarkably rapid diversification of employment and, the structure of the labour force has changed leading to a significant rise in the proportion of the workforce depending on wage labour. The really serious problem was not so much in quantitative terms but in terms of its political importance, is that of growing educated unemployment.

Mathew (1995) opined that the duration of waiting period can be viewed as an index of the gravity of the prevailing educated unemployment. The interval between a person's entry into the labour market on completion of education and/or training and the first regular employment is referred to as the waiting period.

AREA OF THE STUDY

AREA OF THE STUDY

Palakkad District, the second largest district in the state, covers an area of 4480 square kilometers which comes to about 11.3 per cent of the total geographical area of the state. The district is located in central Kerala, the neighbouring districts being Thrissur in south and southwest and Malappuram in north and northwest. It shares a common boundary with the Coimbatore district of Tamil Nadu state in the east. The district is divided into five taluks namely, Palakkad, Alathur, Chittur, Ottappalam and Mannarkad, and further into twelve CD Blocks.

1. Population

The total population in the district as per 1991 census is 23.82 lakhs of which 84.28 per cent is residing in rural areas. Out of the total population, 51.48 per cent is females and only 48.52 per cent males. Thaluk wise and sex wise details on population and the contribution of rural and urban areas are given in Table 3.1.

2. Distribution of working population

Out of the 76,97,868 total main workers in Kerala 7,01,690 are from Palakkad district, which constitute about 9.12 per cent. A distinguishing character of working population in the district is that, it is predominantly of

Table 3.1 Talukwise distribution of population in Palakkad district

(1991)

Name of Taluk	Population details				
	Male	Female	Total	Rural	Urban
Ottappalam	356557 (47.59)	392592 (52.41)	749149 (100.00)	665413 (88.52)	83736 (11.18)
Mannarkad	151656 (49.09)	157254 (50.91)	308910 (100.00)	263488 (85.30)	45422 (14.70)
Palakkad	254068 (49.12)	263143 (50.88)	517211 (100.00)	337178 (65.19)	180033 (34.81)
Chittur	200452 (49.07)	208047 (50.98)	408499 (100.00)	343113 (83.99)	65386 (16.01)
Alathur	193089 (48.45)	205377 (51.48)	398466 (100.00)	398466 (100.00)	-
District Total	1155822 (48.52)	1226413 (51.48)	2382235 (100.00)	2007658 (84.28)	374577 (15.72)

Percentage to total are given in brackets

Source: Census of India (1991). Final Population Totals, Samuel, N.M. (edn), Kerala. p:30-31

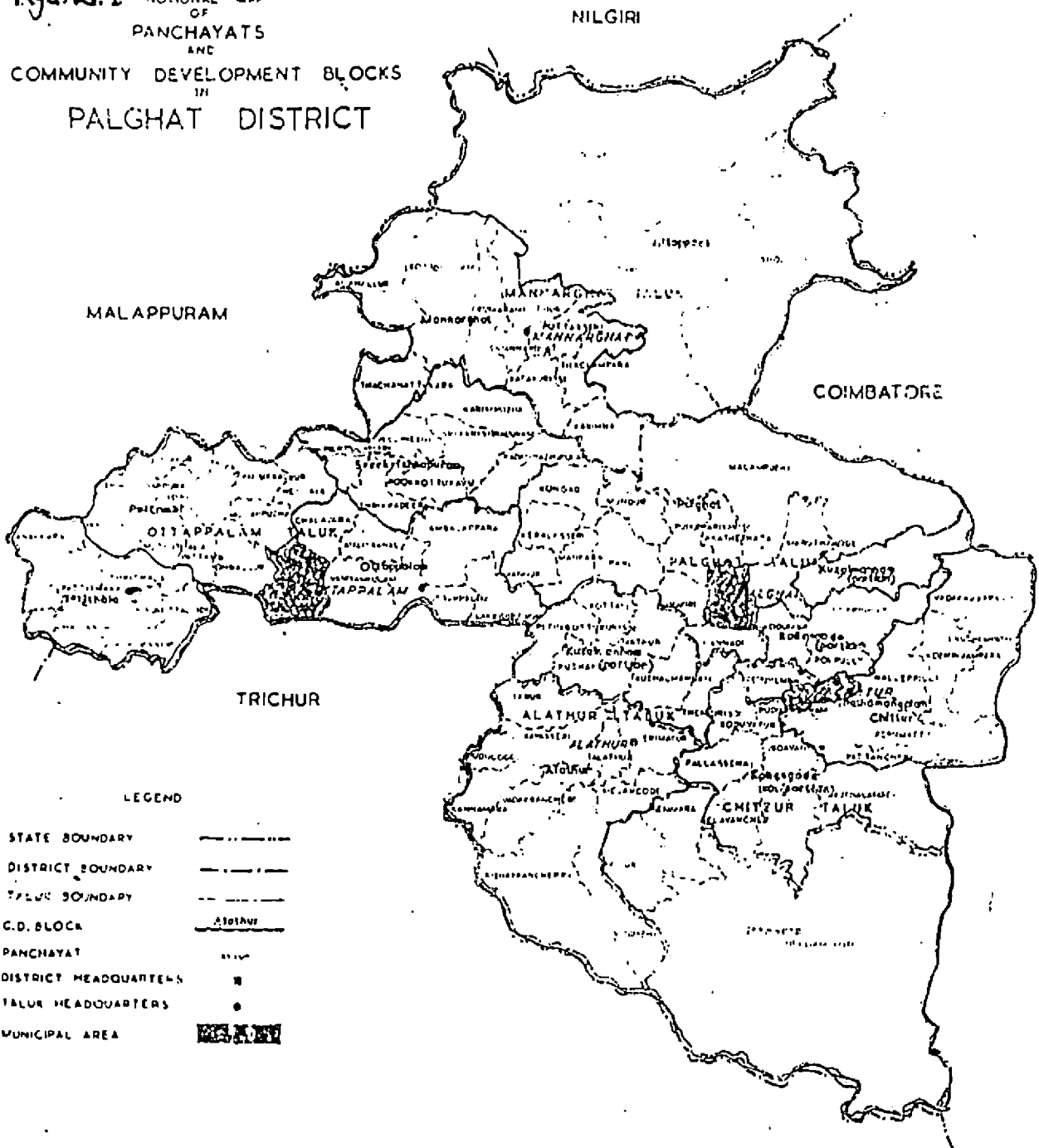
Table 3.2 Distribution of working population in Palakkad district

Area	Culti- vators	Agricul- tural labourers	Livestock, forestry, fishing and other agrl. activity	Mining and quarrying	Manuactur- ing, processing servicing in household industry	Manuactur- ing, processing, servicing in other than household industry	Constr- uction	Trade and commerce	Transport, Storage and Communi- cation	Other services	Total main workers
Palakkad	93160 (13.28)	331605 (47.26)	23394 (3.33)	4543 (0.65)	18745 (2.67)	50507 (7.48)	15144 (2.16)	62392 (8.89)	30129 (4.29)	70071 (9.99)	701690 (100.00)
Kerala	967315 (13.63)	2002975 (28.22)	706028 (9.95)	77669 (1.09)	190231 (2.68)	782125 (11.02)	265121 (3.74)	774699 (10.91)	366059 (5.16)	965616 (13.60)	7097866 (100.00)

Percentage to total given in brackets

Source: Government of Kerala (1994). *Statistics of Rural Development in Kerala.*
Hand Book of Statistics. Commissionerate of Rural Development. Thiruvananthapuram. p:18

Figure: 1 NOTIONAL MAP
OF
PANCHAYATS
AND
COMMUNITY DEVELOPMENT BLOCKS
IN
PALGHAT DISTRICT



agricultural labourers. Of the total main workers 46.27 per cent is agricultural labourers while the corresponding figure for the state is only 28.22 per cent. Further details on working population are given in Table 3.2.

3. Per capita income at current and constant prices

From the table 3.3 it can be seen that there is a constant increase in percapita income at constant prices and current prices over the years. But Palakkad has a rank of only nine at constant prices and ten at current prices in terms of per capita income among the 14 districts in the state.

4. Number of families under poverty line

According to the social group survey of the Commissionerate of Rural Development, Kerala for 1992, Palakkad has a total of 1,52,711 persons below poverty line. Thus the percentage of population below poverty line is estimated to be 6.42 per cent. In this 36,614 are scheduled castes and 4,571 are scheduled tribes

5. Registered working factories and employment

The total number of factories as on 31st December 1993 in Palakkad district is 1,504 and the number of employees is 22,974. The district has 9.57 per cent of factories in the state but only 5.5 per cent of the total employees are working in these factories.

Table 3.3 Per capita income at constant and current prices

(In Rs.)

Area	Constant prices					Current prices				
	1980- 81	1990- 91	1991- 92	1992- 93	1993- 94	19980- 81	1990- 91	1991- 92	1992- 93	19933- 94
Palakkad	1307 (10)	1623 (12)	1757 (9)	1836 (9)	1889 (9)	1307 (10)	3082 (13)	4922 (9)	5469 (8)	5676 (10)
Kerala	1508	1815	1826	1908	1968	1508	4200	5440	5713	6009

The ranking among the districts given in brackets
 Source : Government of Kerala (1994) - Economic Reivew

6. Total job seekers

According to employment exchange statistics the total number of job seekers in the district as on 31.5.1994 was 2,29,787 which was 8.10 per cent of the total job seekers in the state.

7. Land and soil

Palakkad, Chittur and Alathur taluks are more or less plain except for Nelloampathy area of Chittur taluk. Ottappalam and Mannarkad taluks are undulating with hills and valleys. Almost the entire district falls under mid land region except Attappadi block in Mannarkad taluk which lies in highland.

There are three main types of soils in the district, laterite soil, virgin forest soil and black soil. Laterite soil is the prominent soil group and found in the major parts of Ottappalam, Alathur, Palakkad and Chittur thaluks. Virgin forest soil is found mainly in Mannarkad taluk and in the northern region of Ottappalam taluk. Black soil which is an extension of black soils of Deccan plateau is found in Chittur taluk.

8. Climate and Rainfall

The climate of the district is tropical except in Attappady hill ranges, where it is temperate. The normal

Table 3.4 Normal and average rainfall in Palakkad district

(In mm)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Normal	8	9	27	87	161	477	633	349	165	249	136	28	2329
1993	0	21.8	1.0	21.5	111.4	301.8	560.7	301.4	33.3	355.5	96.1	13.6	1878
1994	11.4	4.6	9.9	176.7	53.5	668.8	824.4	264.3	186.5	358.6	136.4	27.8	2722.9

Source: Government of Kerala, Farm Guide, Farm Information Bureau, 1995

rainfall for the past fifteen years and the rainfall received in 1993 and 1994 are given in the table 3.4. Majority of the showers is received during the month of June to August. December, January and February are the lean periods. The average total rainfall for 1993 is 1898 mms. and that of 1994 is 2,723 mm. Thus it can be seen that about 44 per cent more rainfall is obtained in the year 1994 than in 1993.

9. Land utilization pattern

Palakkad constitute 11.3 per cent of total geographical area in Kerala. The percentage of net area sown to the total geographical area is only 49.76 which is less than the state average of 57.9 per cent. But this is adjusted by a high cropping intensity of 161 per cent as against 135 per cent for the state. This is due to relatively more area under rice in the district. The share of forest area to the total geographical area in the district is 31.04 per cent as against the state average of 27.83 per cent. More details are given in Table 3.5.

10. Area and production of different crops

The area and production of the major crops in the district are given in Table 3.6. It can be seen that 27.18 per cent of the total area under paddy and 30.94 percent of the total production in the state is from the district.

Table 3.5 Land utilization pattern

Item	Kerala		Palakkad	
	Area (ha)	% of total	Area (ha)	% of total
Total geographical area	3885497	100.00	438980	100.00
Forest area	1081509	27.83	136257	31.04
Land put to non-agricultural uses	302978	7.79	33038	7.53
Barren and uncultivable land	55229	1.42	9393	2.14
Permanent pastural and other grazing land	1699	0.04	81	0.02
Land under miscellaneous tree crops	34054	0.88	6928	1.58
Cultivable waste	91233	2.35	21796	4.96
Fallow other than current fallow	27404	0.71	5089	1.16
Current fallow	41978	1.08	7842	1.79
Net sown	2249593	57.90	218456	49.76
Area sown more than once	786878		133061	
Total cropped area	3046471	(135)*	351517	(161)*

Source: Government of Kerala - Farm Guide, Farm Information Bureau, 1995

* Cropping intensity

Table 3.6 Area and production of major crops

(1995)

Crops	Area (ha)			Production (tonnes)		
	Kerala	Palakkad	(% share)	Kerala	Palakkad	(% share)
Paddy	537608	146095	27.18	1084878	335646	30.94
Jowar	5935	5932	99.95	3021	3019	99.93
Ragi	1706	1698	99.53	1380	1373	99.49
Pulses	547877	156227	28.51	17070	5243	30.71
Coconut	877012	39514	4.50	5124 (mill. nuts)	163 (mill. nuts)	3.18
Sugarcane	6100	2362	38.72	49874	20249	40.60
Pepper	183478	3359	1.83	49666	407	0.82
Mango	75462	7501	9.94	266346	54639	2.05
Banana	23667	3399	1.44	308871	41372	13.39
Groundnut	15535	15534	99.99	11546	11545	99.99
Sweet potato	2492	1400	56.18	20323	10282	50.59
Cotton	12253	12253	100.00	19776 (bale of 100 kg)	19776 (bale of 100 kg)	100.00

Source: Government of Kerala, Farm Guide, Farm Information Bureau, 1995

About 100 per cent of the total area and production of jowar, ragi, groundnut and cotton in the state are from this particular district.

11. Area under irrigation

Out of the total cultivated area of 28456 ha. 35.84 per cent are irrigated. The area irrigated under different crops in the state as well as in the district are given in the Table 3.7.

12. Livestock and poultry population

Of the total cattle population of 34.24 lakhs in the state 8.88 per cent from this district. The population details of livestock and poultry are given in Table 3.8.

13. Transportation facilities

The total length of motorable roads in the district is 1795 kms out of which 143 km are national highways, 749 km are major district roads, 537 kms other district roads and 366 kms are village roads. The total number of motor vehicles in the district is 54,683 which is 6.2 per cent of the state.

Table 3.7 Cropwise area under irrigation

(1995)

Area	Paddy	Tuber	Vege- table	Coconut	Arecanut	Clove and nutmeg	Other spices & condi- ments	Banana	Bettle wine	Sugar- cane	Others	Total
State	212576	822	6059	105699	22395	953	1673	11005	732	2112	12342	376368
Palakkad	63622	11	728	6563	1921	14	338	1405	16	1273	2408	78299
% share	29.93	1.34	12.02	6.21	8.58	1.47	20.23	12.77	2.19	60.27	19.51	20.82

Source: Government of Kerala, Farm Guide, Farm Information Bureau, 1995

Table 3.8 Livestock and poultry population (Nos.)

(1995)

Area	Cattle	Buffaloe	Goat	Sheep	Pigs	Poultry	Rabbits
State	3423985	329084	1580562	29955	137090	17995803	77198
Palakkad	303935	70099	134110	3864	1678	1283920	2379
% Share	8.88	21.30	8.48	12.9	1.22	7.13	3.08

Source : Government of Kerala (1995) - Farm Guide - Farm Information Bureau

MATERIALS AND METHODS

MATERIALS AND METHODS

In this chapter the methodology of research used in the conduct of the study and the statistical tools used in analysing and interpreting the data are given.

4.1 Choice of study area

The study was conducted in Palakkad district which comprises of five taluks namely Palakkad, Mannarkad, Ottappalam, Aalathur and Chittur. Palakkad is the second largest district in the state and is predominantly rural in character. Here about 92 per cent of the population is residing in rural area. Among the different districts it has the lowest literacy rate of 81.27 per cent against the all Kerala average of 89.81 per cent. The female literacy rate is also the lowest, which is only 75.72 per cent as against the all Kerala average of 86.17 per cent. Moreover as already seen Palakkad has a rank of only nine at constant prices and ten at current prices in terms of percapita income among the 14 districts in the state. All these peculiar characteristics were considered while selecting this particular area for the present study.

4.2 Sample design

The study is based on primary data generated through a sample survey using multistage random sampling technique. A three stage random sampling technique is adopted by

selecting two Panchayats randomly from each of the five taluks in the first stage. From each of the ten panchayats thus selected, one ward was randomly selected in the second stage. In the third stage 15 households were selected randomly from each of the ten wards selected to have a total of one hundred and fifty households from the whole district.

4.3 Collection of data

A well structured comprehensive interview schedule was used to collect the information from the sample households. Questions regarding family details, employment pattern, income structure and details on socio-economic status were included in the interview schedule.

4.4 Method of enquiry

The method of personal interview was adopted to elicit data from respondents. Since details on each member of the household is required for the study maximum effort was taken to meet almost all the members of the household.

4.5 Reference period

This is the period, the length of which is fixed before hand, for which an individual is asked about his gainful activity (Rao, 1973). Reference period of the study was one year stating from 15th March, (1st Meenam) of 1993 to 14th March, (31st Kumbham) of 1994. The interviews were

carried out during the months of April and May, 1994. Thus, the reference year consists of the twelve month period immediately preceding the period of interview. Name of Malayalam months are used in the interview in order to facilitate easy understanding by the respondents.

4.6 Methods of analysis

Various statistical methods are adopted in order to condense the data to facilitate comparison and to extract important information gathered. The data are classified geographically and qualitatively to have a better understanding of the problem.

4.6.1 Tabular analysis

In this study tabular analysis is given more emphasis since it is the simplest and most revealing device for summarizing data. Here comparison and interpretation can be done more easily.

4.6.2 Graphic and diagrammatic presentation

The graphic presentation gives a general awareness of the data and it also helps in quick and accurate comparison. Here bar diagrams, Pie-diagram, Line graphs etc. are used.

4.6.3 Measures of socio-economic status

4.6.3.1 Labour force ratio

Labour force ratio is defined as the labour force expressed as a percentage of total population (Sankar, 1985)

4.6.3.2 Labour force participation ratio

Labour force participation ratio is the percentage of working labour force to the potential labour force (Sankar, 1985).

4.6.3.3 Occupational status

It is the work status pursued by each person for pay, profit or family gain or in other words, the activity which adds value to the national product. However execution of household chores and social commitments are not included in this (NSSO, 1987).

4.6.3.4 Main occupation

This is the occupation in which more than 50 per cent of one's total working mandays per year is engaged.

4.6.3.5 Subsidiary occupation

It is that occupation in which one is engaged on a subsidiary basis for less than 50 per cent of his total working mandays per year for obtaining income.

4.6.4 Measures of income

4.6.4.1 Gross income

Gross income is the sum total of (i) farm income which includes values of crop and livestock products, rent from leased out land, receipt from the sale of farm assets,

custom hire, services etc. and (ii) non-farm income which includes the earnings by services, earning from the resources employed in the non-farm activities, receipt from the sale of non-agricultural assets, gifts etc. and borrowings received from institutional and non-institutional sources (Nandal, 1972).

4.6.4.2 Net income

Gross income minus expenses on crop enterprises, livestock enterprises, permanent labour, non-farm products, rent paid for leased in land, taxes, land revenue, repairs and maintenance charges of buildings, wells, dead stock etc. and the interest on money borrowed is net income (Mishra, 1961).

4.6.5 Measures of unemployment

4.6.5.1 Unemployed

A person who reported unemployed throughout the reference period even though he/she was seeking employment (Singh, 1972).

4.6.5.2 Underemployed

A person employed for less than 300 days during the reference period has been classified as underemployed.

4.6.5.3 Near full employment

These are persons who worked for 271 to 300 days per year. This is arrived from the fact that a worker got 52 Sundays, 12 second Saturdays, 15 government declared

holidays and 15 casual leave which they take per year and this when deducted from 365 gives 271 days.

4.6.5.4 Moderately underemployed

These are persons who worked for 181 to 270 days per year.

4.6.5.5 Severely underemployed

These are persons who worked for 91 to 180 days per year.

4.6.5.6 Very severely underemployed

These are persons who worked for less than 91 days per year.

4.6.6 Measures on relationship between underemployment and socio-economic parameters

Simple correlation was carried out to study the relationship between underemployment and some socio-economic parameters. Analysis of variance is carried out for some variables in order to study their effect.

Simple correlation was carried out to find the relationship between underemployment on one hand and education, age, total land holdings and family income on the other. To find the effect of sex and caste analysis of variance was worked out using the data.

RESULTS AND DISCUSSION

RESULTS AND DISCUSSION

The results obtained by analysing the data collected are presented in this chapter. The results are presented in the form of different tables, graphs, equations etc. The various interpretations for the results based on the objective of the study in mind are also discussed. The detailed discussion on the results would enable us to formulate the different remedial measures which will have to be taken to attack this serious problem of unemployment. The results as well as the discussions on them are presented under four major heads.

1. General socio-economic characteristics of sample households
2. The nature and magnitude of employment and income
3. The kind and extent of unemployment
4. Relationship between employment/unemployment and some socio-economic parameters

5.1 General socio-economic characteristics of sample households

A detailed study of the general socio-economic characteristics of the sample households is necessary for understanding the levels of living and the developmental aspects of the individuals under study. This would enable us to understand the probable reasons for unemployment and underemployment and the way of approach to tackle this

problem. Here the family size of the sample households, the sex and age wise distribution of members their educational status, labour force participation etc are outlined.

5.1.1 Family size of sample households

Size of family of the sample households in the different taluqs and in the whole district are given in table 5.1. It can be seen that 54 per cent of the households had a family size of 5-6 members. Eighty per cent of the sample households has less than or equal to six members in their family. This points out to the disintegration of the joint family system and the positive attitude of the people towards family planning programme. The table also reveals that 13.33 per cent of the families has 7-8 members in their houses and only 6.67 has more than eight members in their home. Among the different taluqs all except Mannarkad has a high percentage of nucleus family of 1-4 members. Mannarkad has only 13.33 per cent but all others has above 23.33 per cent. Mannarkad has a high percentage (66.67) of 5-6 members in their house than the other taluqs which has only 50 to 53.33 per cent. This may be because of the fact that about 50 per cent of the families in Mannarkad belong to muslim community where the idea of family planning programme has not yet found acceptance very intensively. In all the taluqs the percentage of more than nine members in a family is very low as it is only less than ten per cent.

Table 5.1 Distribution of households based on family size

Name of the Taluk	1-4 Members	5-6 Members	7-8 Members	9 and above	Total
Mannarkad	4 (13.33)	20 (66.67)	4 (13.33)	2 (6.67)	30 (100.00)
Palakkad	8 (26.67)	16 (53.33)	3 (10.00)	3 (10.00)	30 (100.00)
Ottappalam	11 (36.66)	15 (50.00)	2 (6.67)	2 (6.67)	30 (100.00)
Alathur	7 (23.33)	15 (50.00)	6 (20.00)	2 (6.67)	30 (100.00)
Chittur	9 (30.00)	15 (50.00)	5 (16.67)	1 (3.33)	30 (100.00)
Total	39 (26.00)	81 (54.00)	20 (13.33)	10 (6.67)	150 (100.00)

Figures in paranthesis indicate percentages

5.1.2 Community/Religion

Community/religion-wise distribution of the selected households is given in Table 5.2. It can be seen that about 31 per cent of the selected households belong to ezhava which comes under other backward class category. The scheduled castes and tribes account for 22 per cent and more than 60 per cent of the households belong to scheduled castes/scheduled tribes and backward classes. Forward caste hindus account for 14.7 per cent and muslims account to 14 per cent. The presence of christian community is very low, that is only eight per cent. If we look into the taluk wise distribution, it can be seen that in Aalathur taluk more than 86 per cent of the total households belong to scheduled castes/scheduled tribes and backward classes. In Mannarkad taluk 46.67 per cent of the total households belong to muslim community and in Chittur taluk forward caste and christians account for 16.67 per cent each.

5.1.3 Sex and Agewise distribution

Sex and agewise distribution of the members of the sample households are given in Table 5.3. The total members in the selected household is 818 out of which 399 are males and the rest 419 are females. With in this, 72 percent of the total population are in the age group of 15-60, 20.05 per cent are children and

Table 5.2 Communitywise distribution of sample households

Name of the Taluk	Hindus				Muslims	Christians	Total
	Forward	Ezhava	OBC	SC/ST			
Mannarkad	3 (10.00)	7 (23.33)	3 (10.00)	3 (10.00)	14 (46.67)	- (0)	30 (100.00)
Palakkad	9 (30.00)	8 (26.67)	3 (10.00)	7 (23.33)	1 (3.33)	2 (6.67)	30 (100.00)
Ottappalam	4 (13.33)	7 (23.33)	5 (16.67)	6 (20.00)	4 (13.33)	4 (13.33)	30 (100.00)
Alathur	1 (3.33)	13 (43.33)	3 (10.00)	10 (33.33)	2 (6.67)	1 (3.33)	30 (100.00)
Chittur	5 (16.67)	11 (36.67)	2 (6.67)	7 (23.33)	0 (0)	5 (16.67)	30 (100.00)
Total	22 (14.67)	46 (30.67)	16 (10.67)	33 (22.00)	21 (14.00)	12 (8.00)	150 (100.00)

Figures in paranthesis indicate percentages in each taluk

Table 5.3 Distribution of family members based on age and sex

Name of Taluk	Less than 14			15-30			31-45			46-60			Above 60			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Mannarkad	17	14	31 (18.79)	27	31	58 (35.15)	17	22	39 (23.64)	17	10	27 (16.36)	3	7	10 (6.06)	81 (49.09)	84 (50.91)	165 (100.00)
Palakkad	11	15	26 (16.05)	25	35	60 (37.04)	19	15	34 (20.99)	14	11	25 (15.43)	9	8	17 (10.49)	78 (48.15)	84 (51.85)	162 (100.00)
Ottappalam	12	20	32 (21.19)	23	28	51 (33.77)	19	14	33 (21.85)	13	9	22 (14.57)	4	9	13 (8.61)	71 (47.02)	80 (52.98)	151 (100.00)
Alathur	13	26	39 (22.03)	28	34	62 (35.03)	19	18	37 (20.9)	13	12	25 (14.12)	9	5	14 (7.9)	82 (46.33)	95 (53.67)	177 (100.00)
Chittur	17	19	36 (22.09)	40	27	67 (41.10)	17	16	33 (20.25)	9	8	17 (10.43)	4	6	10 (6.13)	87 (53.37)	76 (46.63)	163 (100.00)
Total	70	94	164 (20.05)	143	155	298 (36.43)	91	85	176 (21.52)	66	50	116 (14.18)	29	35	64 (7.8)	399 (48.78)	419 (51.22)	818 (100.00)

Figures in parenthesis indicate percentage total in each taluk

7.8 per cent old people. Among the different taluks, Aalathur has the highest number of persons of 177 and Ottappalam has the least of 151 persons. Among the different taluks Palakkad has the highest percentage of old people of 10.49 per cent and the lowest percentage of children of 16.05 per cent. Sex ratio for the whole district is 1050 while it is only 873 for the Chittur taluk. Sex ratio is very high for the Aalathur and Ottappalam taluks which are 1158 and 1127 respectively. Sex ratio is below par among children in Mannarkad. The ratio is also below par in the age group 31-45 every where except Mannarkad. In the next age group also the ratio is below par in most cases.

5.1.4 Literacy and Educational status of the members

Table 5.4 shows the literacy and educational status of the members of the sample households. Literacy level for the district as a whole is 77.02 per cent. Among the different taluks Ottappalam has the highest literacy rate of 84.11 per cent and Chittur has the lowest of 69.94 per cent. Literacy rate of Mannarkad, Palakkad and Aalathur are 76.97, 79.71 and 75.71 per cent respectively. It can be seen that 46.70 per cent of the sample population has an education level upto primary level only, 17.48 per cent of the population has literacy level upto secondary, 9.05 per cent has got higher secondary education and 3.67 per cent are technically educated and graduates. In Ottappalam

Fig.2 Literary rate at taluk level

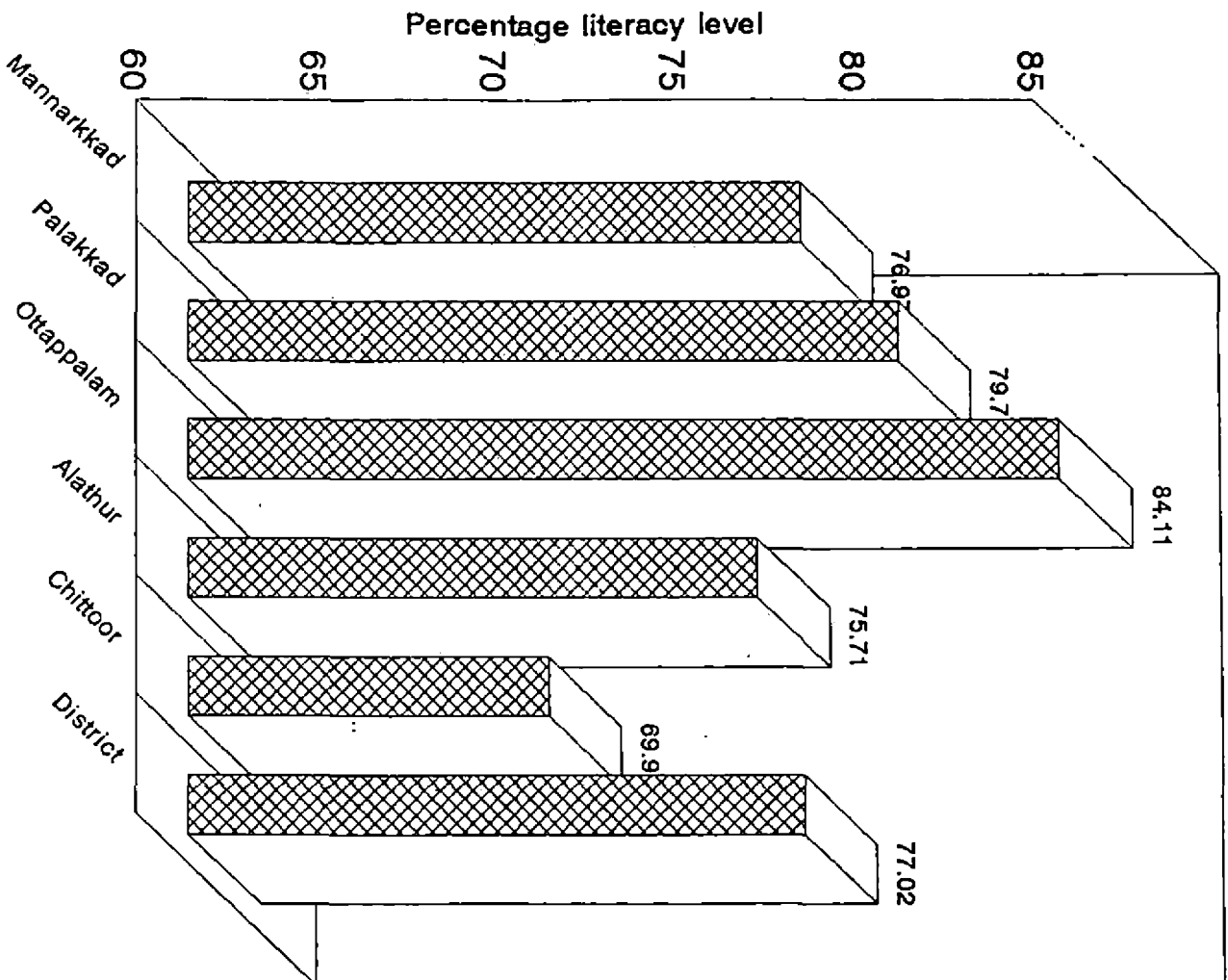
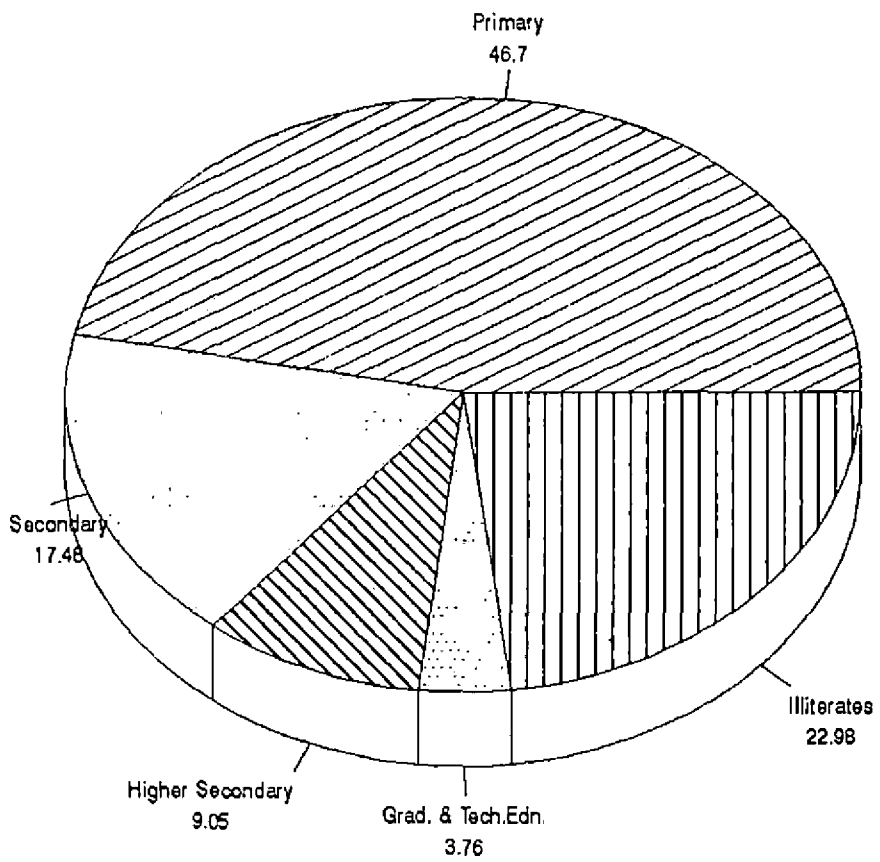


Table 5.4 Literacy and educational status of family members

Name of Taluk	Primary			Secondary			Higher Secondary			Technical Education, Graduation and above			Illiterate			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Mannarkad	49	31	80 (48.48)	13	16	29 (17.58)	4	7	11 (6.67)	4	2	6 (3.64)	12	26	38 (23.03)	81	84	165 (100.00)
Palakkad	39	33	72 (44.44)	13	18	31 (19.14)	8	8	16 (9.88)	4	5	9 (5.56)	14	20	34 (20.29)	76	64	162 (100.00)
Ottappalam	39	39	78 (51.66)	12	14	26 (17.22)	8	6	14 (9.27)	4	5	9 (5.96)	8	16	24 (15.89)	71	60	151 (100.00)
Alathur	40	36	76 (42.94)	17	17	34 (19.21)	10	11	21 (11.86)	2	1	3 (1.69)	13	30	43 (24.29)	82	95	177 (100.00)
Chittur	46	30	76 (46.63)	13	10	23 (14.11)	8	4	12 (7.36)	1	2	3 (1.84)	19	30	49 (30.06)	84	76	163 (100.00)
Total	213	169	382 (46.70)	68	75	143 (17.48)	38	36	74 (9.05)	15	15	30 (3.67)	66	122	188 (22.98)	399	419	618 (100.00)

Figures in parenthesis indicate percentage total in each taluk

Fig.3 Educational status of sample households



the respondents who have educational status upto primary level is 51.66 per cent while it is only 42.94 per cent for Aalathur taluk. It can also be seen that two-third of the total illiterates are females. Illiteracy rate among females is almost 30 per cent as against 16 per cent for men. In all the taluks except Chittur above 17 per cent of the people has got an education upto secondary level, while it is only 14.11 per cent for the Chittur taluk.

5.1.5 Economic status of family members

The distribution of members according to their economic status are given in Table 5.5. It can be seen that maximum number of earners per household is in Aalathur taluk which is 3.2 and the least in Ottappalam taluk which is only 2.7. The dependency ratio is the highest in Ottappalam Taluk (0.86) and it is least in Palakkad taluk (0.76). The proportion of earners to total members is the highest in Palakkad where it is 57.4 per cent of the population and least in Ottappalam taluk where it is only 53.64 per cent. The earners per household for the whole district is 3.01 persons per household and the dependency rate and percentage of earners to total members are 0.81 and 55.13 respectively.

5.1.6 Labour force participation

Out of the total population of 818 people, 64.67 per cent form the potential labour force. This included people with in the age limit of 15-60 years except students,

Table 5.5 Economic status of the family members

Taluk	No. of earners			No. of dependents			Total members	Member per households	Earners per household	Dependancy ratio	Percentage of earners to total members
	M	F	T	M	F	T					
Mannarkad	55	35	90	26	49	75	165	5.50	3.00	0.83	54.55
Palakkad	48	45	93	30	39	69	162	5.40	3.10	0.74	57.41
Ottappalam	48	33	81	23	47	70	151	5.03	2.70	0.86	53.64
Alathur	51	45	96	31	50	81	177	5.90	3.20	0.84	54.24
Chittur	58	33	91	29	43	72	163	5.43	3.03	0.79	55.83
Total	260	191	451	139	228	367	818	5.45	3.01	0.81	55.13

disabled and mentally retarded people. It can be seen that 85.26 percent of the potential labour force has some kind of work. While 92.20 per cent of male population are working, the labour force participation rate is only 77.33 percent for the females. Within the different taluks, the labour force ratio is only 60.93 for Ottappalam taluk. The labour force ratio for other taluks Mannarkad, Aalathur and Chittur are 66.06, 62.71 and 65.64 per cent respectively. The labour force participation ratio for Mannarkad taluk is 82.57 per cent while it is 88.04 percent for Ottappalam taluk. Even though the labour force ratio is only 60.93 per cent for Ottappalam taluk, labour force participation is very high in this taluk. The labour force participation for Palakkad, Aalathur and Chittur taluks are 84.55, 86.49 and 85.05 per cents respectively. In almost all the taluks there is a wide variation in labour force ratio and in labour force participation ratio between the sexes. In Ottappalam labour force ratio is only 50 per cent for females while it is 73.24 per cent for male population. This wide variation is very clear for other taluks too. In the case of labour force participation rate, it is as low as 68.62 per cent in Mannarkad for females where it is 94.83 percent for male population. This wide variation is evident in Chittur taluk too. The low labour force ratio among female population is because of the fact that the urge for higher education is more in case of females than for males. Most of the men after attaining some basic education is in search of some work, while the females

Table 5.6 Labour force participation of family members

Name of Taluk	Total population			Potential labour force			Working labour force			Labour force ratio			Labour force participation ratio		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Mannarkad	81	84	165	58	51	109	55	35	90	71.60	60.71	66.06	94.83	68.62	82.57
Palakkad	78	84	162	55	55	110	48	45	93	70.51	65.48	67.90	87.27	81.82	84.55
Ottappalam	71	80	151	52	40	92	48	33	81	73.24	50.00	60.93	92.31	82.50	88.04
Alathur	82	95	177	56	55	111	51	45	96	68.29	57.89	62.71	91.07	81.82	86.49
Chittur	87	76	163	61	46	107	58	33	91	70.11	60.53	65.64	95.08	71.74	85.05
Total	399	419	818	282	247	529	260	191	451	70.68	58.95	64.67	92.20	77.33	85.26

prefer to study more. The low labour force participation ratio in the case of females in Mannarkad is because of larger percentage of Muslim families in the area where the females are reluctant to work because of their social customs.

5.1.7 Details on land holdings

Land holding pattern of the sample families is given in Table 5.7. As is evident from the table, the total area owned is the highest in Chittur taluk with an area of 50.92 acres and Mannarkad has the least with a total area of 26.06 acres. Out of the 150 households, 40 households have an area of less than 50 cents each and 49 households have an area between 50 cents and one acre, ie about 60 per cent of the total household has area less than one acre and they possess only 23 per cent of the total area. Thirty households have an area between 1-2 acres and they possess 22 per cent of the total area. Fourteen households have an area between 2-3 acres and eleven households have an area between 3-5 acres. Only six households have an area of above 5 acres but they possess 17 per cent of the total area. The top 11.33 per cent of the holdings have with them 38.32 per cent of the total area.

5.1.8 Cropping pattern

Cropping pattern and the cropping intensity of the selected households in different taluks and for the whole

Table 5.7 Land holding pattern of sample households

Area in acres	Talukwise number of holdings					Total number of holdings	Percentage	Total area (acres)	Percentage
	Mannarkad	Palakkad	Ottappalam	Alathur	Chittur				
< 0.5	8	7	9	10	6	40	26.67	11.74	5.83
0.5-1	14	9	9	7	10	49	32.67	35.32	17.55
1 - 2	7	6	5	5	7	30	20.00	43.72	21.73
2 - 3	1	4	4	3	2	14	9.33	33.35	16.57
3 - 5	-	4	3	3	1	11	7.33	42.80	21.27
> 5	-	-	-	2	4	6	4.00	34.30	17.05
Total	26.06	42.31	37.21	44.73	50.92	150	100.00	201.23	100.00
Average area owned per household	0.87	1.41	1.27	1.49	1.70	-	-	1.34	-

Table 5.8 Cropping pattern of sample households

Crops	Talukwise area in acres					Total
	Mannarkad	Palakkad	Ottappalam	Alathur	Chittur	
Paddy	6.05	14.55	16.15	34.20	28.68	99.63 (33.92)
Coconut	5.45	14.68	12.37	6.42	4.07	42.99 (14.64)
Banana	3.70	6.52	4.41	5.71	4.68	25.02 (8.52)
Arecanut	1.80	2.95	2.96	1.38	1.13	10.22 (3.48)
Tapioca and other tuber crops	3.10	3.25	3.03	1.89	0.80	12.07 (4.11)
Vegetables	1.35	3.86	3.80	5.35	6.71	21.07 (5.35)
Pulses and groundnut	1.15	5.75	6.29	8.69	12.56	34.44 (11.72)
Other crops	10.69	8.57	8.01	7.37	14.65	49.29 (16.78)
Gross cropped area	33.29	60.13	56.02	71.01	73.28	293.73 (100.00)
Net area sown	26.06	42.31	37.21	44.73	50.92	201.23
Cropping intensity	127.74	142.12	150.55	158.75	143.21	145.97

Figures in parantheses indicate percentage to gross cropped area

district is indicated Table 5.8. It can be seen that the cropping intensity for the sample households in the district is 145.97 and it is comparable with the cropping intensity of the whole district of 152.57. The cropping intensity is only 127.72 in Mannarkad taluk and it is due the high percentage of uplands where perennial crops like rubber, cashew, coconuts etc are cultivated as monocrops. The cropping intensity for Ottappalam and Aalathur taluks are much more than the average cropping intensity of the whole district (150.55 and 155.75 respectively). This is due to the fact that in these places the low land area is more where two or some cases three crops (mainly paddy) are taken in the same field. From this, it would appear that cropping intensity as traditionally workedout is meaningless. In Palakkad and Chittur the cropping intensity is 142.12 and 143.21 respectively. The major crops grown in the district are paddy, coconut and banana and within this, paddy is cultivated in about 34 per cent area. Coconut accounts for 14.64 per cent area. Pulses and groundnut account for 11.72 per cent area. Within the different taluks, Aalathur and Chittur have relatively more area under rice and in Chittur taluk cotton, groundnut, sugarcane etc. are also cultivated.

5.1.9 Housing pattern

The type of houses and their access to electricity connection is illustrated in Table 5.9. It can be seen

Table 5.9 Housing pattern of sample households

Taluks	Type and number of houses			Total	Access to electricity connection	
	Thatched	Tiled	Terraced		N.E.	E
Mannarkad	4 (13.33)	19 (63.33)	7 (23.33)	30 (100.00)	13 (33.33)	17 (56.67)
Palakkad	3 (10.00)	18 (60.00)	9 (30.00)	30 (100.00)	8 (26.67)	22 (73.33)
Ottappalam	2 (6.67)	22 (73.33)	6 (20.00)	30 (100.00)	12 (40.00)	18 (60.00)
Alathur	6 (20.00)	21 (70.00)	3 (10.00)	30 (100.00)	14 (46.67)	16 (53.33)
Chittur	8 (26.67)	19 (63.33)	3 (10.00)	30 (100.00)	19 (63.33)	11 (36.67)
Total	23 (15.33)	99 (66.00)	28 (18.67)	150 (100.00)	66 (44.00)	84 (56.00)

Figures in parantheses indicate percentage to total

that 66 per cent of the total houses are tiled and 18.67 per cent are terraced houses. It is noted that 15.33 percent of the total houses are still thatched. More of thatched houses are seen in Chittur taluk and are less in Ottappalam taluk. More of terraced houses are seen in Palakkad, Mannarkad and Ottappalam. In Palakkad only 56 per cent of the houses have got electricity connection. It is as low as 36.67 per cent in Chittur taluk and in Palakkad 73.33 per cent of them have got electricity connection.

5.2 The nature and magnitude of employment and income

The employment pattern and income of the sample population and the number of days employed by these different class of workers are explained in this section. The nature of main and subsidiary occupation of each worker and the number of days employed in main and subsidiary occupations are identified. The extent of income from different sources and the disparity in income among different workers are also discussed.

5.2.1 Occupational status-Main

Here the workers are classified into ten different categories according to the nature of main activity they are undertaking. Main activity status is defined according to the number of days they spend in each occupation. The

Table 5.10 Distribution of working labour force based on main occupation

Name of taluk	Cultivators			Agricultural labourers			Livestock, fishing, forestry and other activities			Mining and quarring			Manufacturing, processing, servicing in household industry			Manufacturing, processing, servicing in other than household industry		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	(1)			(2)			(3)			(4)			(5)			(6)		
Mannarkad	15	8	23 (25.56)	14	12	26 (28.89)	1	6	7 (7.78)	-	-	-	5	1	6 (6.67)	2	-	2 (2.22)
Palakkad	12	10	22 (23.66)	9	10	19 (20.43)	2	7	9 (9.48)	-	-	-	1	9	10	4	1	5
Ottappalam	7	7	14 (17.28)	16	11	27 (33.33)	-	4	4 (4.94)	-	-	-	3	5	8 (9.88)	4	-	4 (4.94)
Alathur	12	8	20 (20.83)	19	14	33 (34.38)	1	6	7 (7.29)	-	-	-	1	5	6 (6.25)	-	3	3 (3.13)
Chittur	14	4	18 (19.78)	21	14	35 (38.46)	-	2	2 (2.2)	-	-	-	1	5	6 (6.59)	5	3	8 (8.79)
Total	60	37	97 (21.51)	79	61	140 (31.04)	4	25	29 (6.43)	-	-	-	11	25	36 (7.98)	15	7	22 (4.88)

Table 5.10 Contd.....

Name of Taluk	Construction			Trade and Commerce			Transport, storage and communication			Other services			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	(7)			(8)			(9)			(10)			(11)		
Mannarkad	4	5	9 (10.00)	5	1	6 (6.67)	-	-	-	9	2	11 (12.22)	55	35	90 (100)
Palakkad	5	2	7	7	1	8	2	-	2	6	5	11	48	45	93 (100)
Ottappalam	5	4	9 (11.11)	4	1	5 (6.17)	3	-	3 (3.70)	6	1	7 (8.64)	48	33	81 (100)
Alathur	6	6	12 (12.50)	5	-	5 (5.21)	1	-	1 (1.04)	6	3	9 (9.38)	51	45	96 (100)
Chittur	8	1	9 (9.89)	5	2	7 (7.69)	2	-	2 (2.20)	2	2	4 (4.4)	58	33	91 (100)
Total	28	18	46 (10.20)	26	5	31 (6.57)	8	-	8 (1.77)	29	13	42 (9.31)	260	191	451 (100)

main occupation of a worker is that occupation in which he/she spent more than 50 per cent of his total working labour days. The main occupational status of the sample population is given in Table 5.10.

Among the different class of workers' agricultural labourers account for 31.04 per cent and cultivators account for 21.51 per cent. Another 6.43 per cent is engaged in livestock, forestry and fishing activity. Thus in rural areas of Palakkad district almost 60 per cent of the total population has agriculture as their primary occupation. It is also noted that 10.2 per cent of the population is engaged in construction. The percentage of workers engaging in this activity may increase over the years as they got a continuous employment and a high wage rate in this activity. It was also found that 7.98 per cent of the total workers are engaged in manufacturing processing, servicing in household industry and only 4.88 per cent in the same in other than household industry. It is also noteworthy that 6.87 per cent of the workers are engaged in trade and commerce, 1.77 per cent in transport, storage and communication and 9.31 per cent of the workers engaged in services other than those already narrated. In every activity except livestock, fishing and forestry and manufacturing, processing, servicing in household industry, males outnumbered females.

Fig.4 Percentage participation of working population in different occupation (Male)

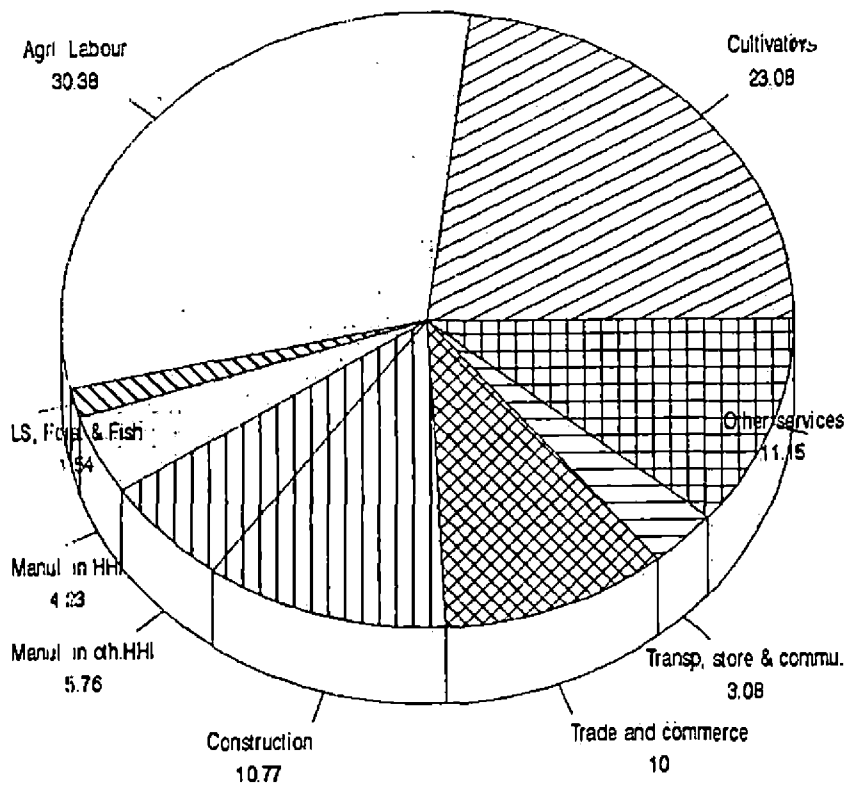
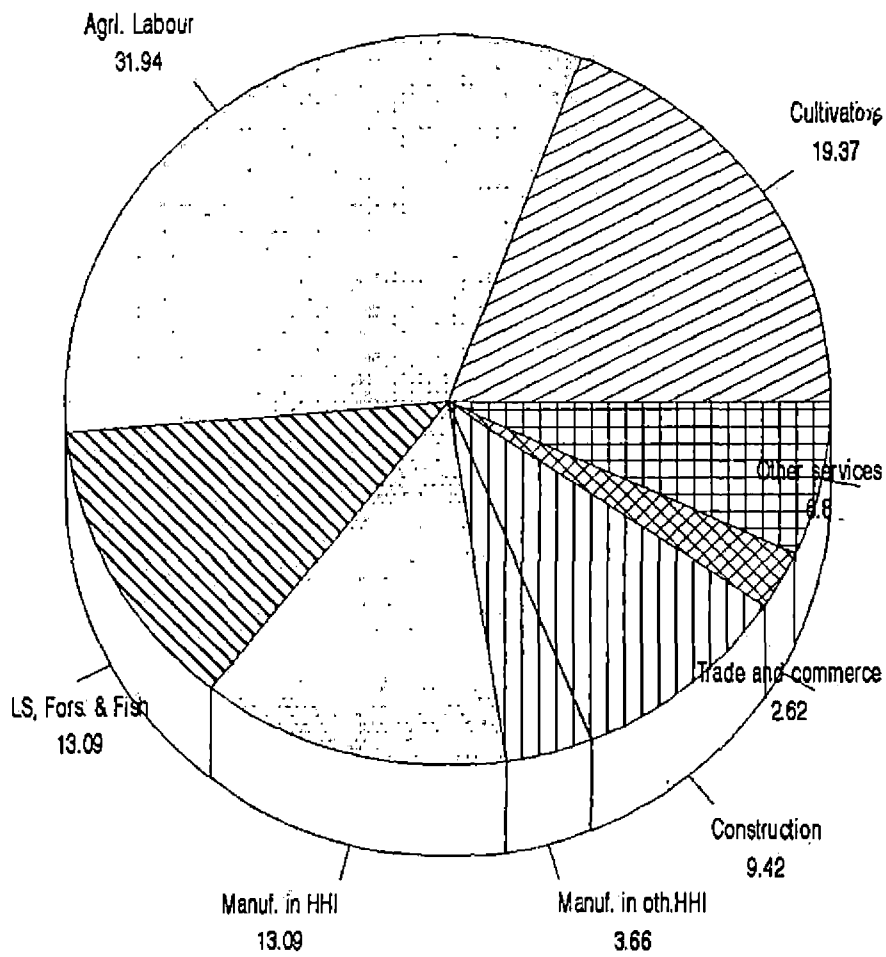


Fig.5. Percentage participation of working population in different occupation (Female)



Among the different taluks Chittur, Aalathur and Ottappalam have higher percentage of agricultural labourers of 38.46, 34.38 and 33.33 per cent respectively. In Palakkad taluk agricultural labourers are only 20.43 per cent of the total workers and in Mannarkad it is 28.8 per cent. The per cent of cultivators in different taluks ranges from 17.28 per cent in Ottappalam taluk to 25.56 per cent in Mannarkad. The percentage of workers engaged in livestock activity ranges from 2.2 per cent in Chittur to 9.68 per cent in Palakkad. This difference is because of the good marketing facilities available for milk to people in Palakkad taluk as the urban market of district headquarters is situated in this taluk. There is not much variation in case of percentage workers engaged in household industry, construction and trade and commerce.

The percentage participation in different activities by sexes is given in the form of piedigram. It can be seen from figure - that the percentage of cultivators is more in case of males than females; 23.08 and 19.37 respectively of corresponding total working population. But the situation is different in the case of agricultural labourers. High percentage (31.94) of females are engaged in this occupation than males (30.38). It can also be seen that about 13.09 per cent of female working population is engaged in livestock activity while it is only 1.54 per cent in the case of males. The same pattern can be seen in

the case of household industry too. Here also a higher percentage (13.09) of women are engaged than men (4.23). This may be because of the fact that the women can spend their excess time along with their household works in these activities. In case of trade and commerce ten per cent of male working population are engaged in this particular activity where as it is only 2.62 per cent for females. It is also noted that no female is engaged in transport storage and communication while it is 3.08 per cent for males. More than 11 per cent of the male workers are engaged in other services while it is only 6.80 per cent in case of females.

5.2.2 Participation in subsidiary activity

As shown in Table 5.11, 69.4 per cent of the total workers have one or other type of secondary activity. Participation in secondary activities is because of various reasons. Most of the workers who are not cultivators have a piece of land and they raise some crop in their fields which gave them some additional income. Another reason is that during off season the agricultural labours and cultivators would have to find some secondary activity to earn some income in this period. There are also others who engage themselves in income generating activities during their spare time.

Table 5.11 Participation of working labour force in subsidiary activities

Taluk	Total number of workers			Number of workers having any type of secondary activity			Percentage of main workers having any secondary activity		
	M	F	T	M	F	T	M	F	T
Mannarkad	55	35	90	42	18	60	76.36	51.43	66.66
Palakkad	48	45	93	32	20	52	66.67	44.44	55.91
Ottappalam	48	33	81	39	24	63	81.25	72.73	77.78
Alathur	51	45	96	40	30	70	78.43	66.67	72.92
Chittur	58	33	91	47	21	68	81.03	63.64	74.75
Total	260	191	451	200	113	313	76.92	59.16	69.40



Of the male workers 76.92 per cent have one or other type of secondary activity while only 59.16 per cent of the females have such activities. This is mainly because most of the female workers have to do their household chores along with their daily occupation. So only a few got additional time to spend for a secondary activity. Moreover, all may not have opportunity for taking up such activities and the desire to do so. Among the different taluks, in Ottappalam 81.25 per cent of males and 72.73 per cent of females have one or other type of secondary activity while in Palakkad only 66.67 per cent of males and 44.44 per cent of females have got secondary activities.

5.2.3 Nature of secondary activities

It is clear from Table 5.12 that almost 50 per cent of the total workers who are engaged in subsidiary occupations, choose cultivation as their secondary activity. This ranges from 44.12 per cent in Chittur taluk to 63.49 per cent in Ottappalam taluk. Other than cultivation people prefer livestock rearing as an attractive secondary activity, is mainly because the byproduct obtained from the cultivation can be used for rearing these livestock. It may also be noted that 7.67 per cent of the total workers who have subsidiary occupation, choose construction as their secondary activity. There has been a tendency among agricultural labourers to shift to construction as their main activity

Table 5.12 Distribution of working labour force based on nature of secondary occupation

Name of Taluk	Cultivators			Agricultural labourers			Livestock, fishing, forestry and other activities			Mining and Quarring			Manufacturing processing, servicing in household industry			Manufacturing, processing, servicing in other than household industry		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	(1)			(2)			(3)			(4)			(5)			(6)		
Mannarkad	23	7	30	4	2	6	6	7	13	-	-	-	2	-	2	1	-	1
Palakkad	19	8	27	6	4	10	4	6	10	-	-	-	1	1	2	-	-	-
Ottappalam	25	15	40	5	3	8	6	5	11	-	-	-	-	-	-	-	-	-
Alathur	16	12	28	8	3	11	6	8	14	-	-	-	1	5	6	-	-	-
Chittur	18	12	30	7	1	8	13	3	16	-	-	-	-	4	4	-	-	-
Total	101	54	155	30	13	43	35	29	64	-	-	-	4	10	14	1	-	1

Table 5.12 Contd.....

Name of Taluk	Construction			Trade and Commerce			Transport, storage and communication			Other services			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	(7)			(8)			(9)			(10)			(11)		
Mannarkad	4	2	6	2	-	2	-	-	-	-	-	-	42	18	60
Palakkad	2	1	3	-	-	-	-	-	-	-	-	-	32	20	52
Ottappalam	2	1	3	1	-	1	-	-	-	-	-	-	39	24	63
Alathur	3	2	5	5	-	5	-	-	-	1	-	1	40	30	70
Chittur	6	1	7	3	-	3	-	-	-	-	-	-	47	21	68
Total	17	7	24	11	-	11	-	-	-	1	-	1	200	113	313

and what is noted above appears to be the transition of the agricultural labourers to take construction as their main activity. It is notable that only 4.47 per cent take activities in household industry as their secondary activity which is a very progressive activity.

5.2.4 Average number of days employed in different activities

Average number of days employed by different workers in different taluks and for the district as a whole are indicated in Table 5.13. It can be seen that on an average the male cultivators are engaged for 140.23 days in an year whereas female cultivators are engaged for only 87.73 days. The lower number of days employed by female cultivators is due to the fact that the female cultivator helps cultivation in busy cropping seasons only. Male agricultural labours were engaged for 143.83 days and female agricultural labours for 142.52 days in an year. The livestock activity offer 138.75 days for men and 122.16 days employment for women in an year. All other activities except those in primary occupation offer more than 200 days employment per year. Both male and female workers in construction activity got around 200 day employment per year. This may be one of the reasons why agricultural labours tend to move from their usual occupation to construction.

Among the different taluks, in Palakkad the male cultivators got 164.68 days of employment per year where as

in Mannarkad they got only 116.60 days employment. This lower number of days employment is due to the difference in cropping pattern in Mannarkad where perennial crops predominate and due to the lower per household area which is only 0.87 acre where as it is 1.24 in Palakkad taluk. In Chittur the female cultivators got an average of 109.25 days employment per year whereas it was only 77.71 days in Ottappalam. This is primarily due to the acreage effect of paddy crop in Chittur area.

In Ottappalam and Aalathur male agricultural labours got an average of 155.25 and 154.26 days of employment per year where as in Mannarkad they got 122.50 days employment only. The average number of days employed by male agricultural labours in Palakkad and Chittur were 133.11 and 142.02 days per year respectively. In Aalathur, Palakkad and Chittur the average number of days employed by female agricultural labourers, were 166.07, 156.80 and 152.00 days respectively and this is more than that of male agricultural labourers. This is due to the greater requirement of female agricultural labourers for cultivation in paddy which is a major crop cultivated in these areas. In live stock they got around 150 days employment per year for both male and female workers. Even though livestock rearing is an year round labour requiring enterprise, the per day requirement of labour is less than 4 hours. So it can be taken only as a half day employment.

Table 5.13 Employment pattern of family members (No. of days/worker)

Name of Taluk	Cultivators		Agricultural labourers		Livestock, fishing, forestry and other activities		Manufacturing, processing, servicing in household industry		Manufacturing, processing, servicing in other than household industry	
	M	F	M	F	M	F	M	F	M	F
	(1)		(2)		(3)		(4)		(5)	
Mannarkad	116.60	80.25	122.50	87.25	131.00	90.00	251.80	215.00	238.00	00.00
Palakkad	164.58	87.50	133.11	156.80	131.50	125.14	218.00	242.33	254.75	238.00
Ottappalam	157.00	71.71	155.25	142.64	00.00	143.75	271.00	250.80	271.00	00.00
Alathur	144.67	93.50	154.26	166.07	161.00	130.33	263.00	245.80	-	255.00
Chittur	132.50	109.25	142.62	152.00	-	140.50	242.00	244.40	246.00	255.33
Total	140.23	87.73	143.33	142.52	138.75	122.16	254.09	244.04	256.27	252.71

Table 5.13 Contd.....

Name of Taluk	Construction		Trade and Commerce		Transport, storage and communication		Other services	
	M	F	M	F	M	F	M	F
	(7)		(8)		(9)		(10)	
Mannarkad	190.25	186.90	292.00	310.00	-	-	286.67	276.50
Palakkad	221.40	194.00	309.00	276.00	294.00	-	300.00	285.00
Ottappalam	232.00	224.50	297.75	303.00	299.67	-	289.00	264.00
Alathur	224.67	217.17	285.40	-	263.00	-	289.83	274.00
Chittur	212.88	196.00	301.60	292.50	277.00	-	290.00	269.50
Total	217.11	198.13	298.04	294.80	286.75	-	290.79	277.15

Beyond this more than one person may attend the same animal in a household. In almost all activities other than the primary ones, they got more than 200 days of employment. In trade and commerce and in service sector they got even 300 days of employment per year. Construction offers more than 200 days of employment for both male and female workers in almost all taluks.

5.2.5 Number of days employed in main activity

The number of days the workers spend in their main activity is indicated in Table 5.14. It can be seen that female cultivators got only 61.12 days employment per year where as the male cultivators got 99.08 days employment in their main occupation. This as stated above, is mainly because most of the female cultivators helps for cultivation only during the peak season. Female agricultural labourers got more number of days of 104.87 days than the male agricultural labourers which is only 102.44 days. In livestock, the male and female workers spend 138.75 days and 106.96 days in their main activities. The workers whose main activity is construction spent 175.50 and 161.78 days respectively for male and female. Those in trade and commerce got as much as 283.00 and 294.8 days for males and females in their main activity.

Among the different taluks, in Palakkad the male cultivators worked for 119.50 days whereas in Mannarkad

Table 5.14 Employment pattern of working labour force in main activity

Name of Taluk	Cultivators		Agricultural labourers		Livestock, fishing, forestry and other activities		Manufacturing, processing, servicing in household industry		Manufacturing, processing, servicing in other than household industry	
	M	F	M	F	M	F	M	F	M	F
	(1)		(2)		(3)		(4)		(5)	
Mannarkad	75.00	65.00	79.57	65.42	131.00	74.00	236.00	173.00	238.00	-
Palakkad	119.50	69.40	97.22	120.90	131.50	109.57	218.00	234.56	240.70	238.00
Ottappalam	103.71	59.00	105.50	96.64	-	106.50	256.00	229.50	259.00	-
Alathur	93.53	68.13	107.26	111.36	161.00	126.00	263.00	219.20	-	255.00
Chittur	107.86	89.25	113.24	127.21	-	140.50	242.00	211.20	223.60	255.33
Total	99.08	61.12	102.44	104.87	138.75	106.96	242.82	223.40	239.52	252.71

Table 5.14 Contd.....

Name of Taluk	Construction		Trade and commerce		Transport, storage and communication		Other services	
	M	F	M	F	M	F	M	F
	(7)		(8)		(9)		(10)	
Mannarkad	162.52	141.80	274.40	310.00	-	-	273.78	276.50
Palakkad	177.60	148.00	290.71	276.00	266.00	-	271.67	281.60
Ottappalam	191.00	191.50	283.75	303.00	291.33	-	264.50	264.00
Alathur	170.17	157.50	279.00	-	263.00	-	270.17	274.00
Chittur	175.12	196.00	284.20	292.50	277.00	-	271.50	269.50
Total	175.50	161.78	283.00	294.80	277.87	-	270.52	275.85

they worked for 75 day per year only. In the case of female cultivators, those in Chittur worked for 59.25 days where as it was only 59 days in Ottappalam taluk. The pattern which is present in the district wise data can also seen in the taluk in all other cases.

5.2.6 Income pattern of the employed persons

The sourcewise, income receipt of employed persons in different occupations is given in Table 5.15. The total income of each worker is the sum total of his receipt of income from main occupation and subsidiary occupation. For the class of workers like cultivators and livestock rearing people where no definite wage structure is prevalent, income is computed on the basis of wage which they would have to be paid, if wage labour is engaged for the jobs.

Here it can be seen that the male cultivators had an income of Rs. 7126.32 from main occupation and an income of Rs. 2078.65 from subsidiary occupation, whereas the female cultivators got only Rs. 3603.40 from main occupation and 813.85 from subsidiary occupation. This difference is because of the variation in average number of days of employment for male and female cultivators. Male cultivators worked for about 140 days in an year whereas female cultivators did so only for 87 days. Male agricultural labourers received an income of Rs. 11071.35, where as the female agricultural labourers received only

Table 5.15 Income pattern of the employed (in Rs.)

Occupational categories		Mean income per person employed		
		Income from main occupation	Income from subsidiary occupation	Total
Cultivators	M	7126.32 (77.42)	2078.65 (22.58)	9204.97 (100.00)
	F	3603.40 (81.58)	813.85 (18.42)	4417.25 (100.00)
Agricultural labourers	M	8295.64 (74.93)	2775.71 (25.07)	11071.35 (100.00)
	F	6607.81 (76.35)	2046.32 (23.64)	8654.13 (100.00)
Livestock, fishing, forestry and other activities	M	5134.75 (100.00)	-	5134.75 (100.00)
	F	3495.85 (81.85)	775.20 (18.15)	4271.05 (100.00)
Manufacturing, processing, servicing in household industry	M	12867.46 (95.97)	540.96 (4.03)	13408.42 (100.00)
	F	9602.62 (90.61)	994.56 (9.39)	10597.18 (100.00)
Manufacturing, processing, servicing in other than household industry	M	13651.64 (94.34)	819.77 (5.66)	14471.41 (100.00)
	F	12868.21 (95.38)	623.28 (4.62)	13491.49 (100.00)
Construction	M	15170.50 (87.45)	2176.20 (12.55)	17346.70 (100.00)
	F	12680.62 (85.16)	2210.12 (14.84)	14890.74 (100.00)
Trade and Commerce	M	26575.50 (97.84)	594.66 (2.16)	27470.16 (100.00)
	F	14034.80 (100.00)	-	14034.80 (100.00)
Transport, storage and communication	M	15617.29 (96.80)	516.12 (3.20)	16133.41
	F	-	-	-
Other services	M	21812.12 (95.26)	1085.79 (4.74)	22897.91 (100.00)
	F	20667.30 (99.54)	95.17 (0.46)	20762.4 (100.00)

Figures in parenthesis indicate percentages

Rs. 8654.13. Even though there is not much marked difference between the number of days employed by both sexes (143.33 days for male and 142.52 days for females). This difference is due to the wage structure prevalent in the area. Here the female wage is only less than three fourth ($3/4$) of the male wage rate. Moreover, in some operations like rice harvesting, coconut collection etc. they get wages in kind and when we convert this kind form of wage into rupee equivalent, it will be usually less than the prevailing money wage rate. The male and female labourers in livestock got almost equal income of Rs.5000/- per year. The workers in manufacturing, processing, servicing in household industries got around Rs.10,000 and Rs.13,000 for females and males as income. In almost all other occupations both male and female workers got an income of around Rs.15,000 or more per year.

In almost all the categories of workers, it can be seen that the average income received by the female workers were lower than that of male workers. Eventhough the government implemented equal wages for equal work, it has not yet reached the rural level. The higher average income for the male labour is also may be due to the higher subsidiary occupation they are receiving. Most of the females have to do their household duties after attending their main occupation so the average number of days they spend in subsidiary occupation is less which inturn leads to a lower income.

5.2.7 Average income of households

The average income of households of each taluk and of the district as a whole are given in Table 5.16. The total income of each household is expressed as the sum of net farm income and non-farm income. Net farm income include the net income from cultivation, livestock and the sale of farm products. Non-farm income include that from business, service, trade, sale of non-farm assets and the current borrowings received during the reference period. It can be seen that the average family income for the district as a whole was Rs. 37465.35 in which 83.28 per cent is non-farm income and 19.10 per cent is net farm income.

Among the different taluks Palakkad had the highest average total income as well as non-farm income which accounted to Rs. 43805.53 and Rs 36382.10 respectively and the latter was 83.28 per cent of the total. The average net farm income was the highest in Chittur taluk which was Rs. 9491.17 and was 25.42 percent of the total income. The average income was the lowest in Mannarkad which was only Rs. 33693.10 and this due to the low farm income in that particular area which was only Rs. 3845.20. In Aalathur and Ottappalam the average family incomes were Rs. 35608.07 and Rs. 36887.23 respectively and farm incomes were 19.53 per cent and 22.14 per cent of the average income in corresponding taluks.

Table 5.16 Average income of sample households

Taluk	Net farm income	Non-farm income	Total
Mannarkad	3845.20 (11.41)	29847.90 (88.59)	33693.10 (100.00)
Palakkad	7323.43 (16.72)	36482.10 (83.28)	43805.53 (100.00)
Ottappalam	6952.90 (19.53)	28655.17 (80.47)	35608.07 (100.00)
Alathur	8165.40 (22.14)	28721.83 (77.56)	36887.23 (100.00)
Chittur	9491.17 (25.42)	27841.67 (74.58)	37332.83 (100.00)
Total	7155.62 (19.10)	30309.73 (80.90)	37465.35 (100.00)

Figures in paranthesis indicate percentages

5.2.8 Disparity in incomes

Table 5.17 shows frequency distribution of sample families in different income classes, where, at the bottom 4.69 per cent of the sample families were below poverty line with average income less than Rs.11,000/- per annum, top 4 per cent of the families had income above Rs.1,00,000/-. Largest number of families was in the income bracket of Rs.25,001 - 50,000 and they contributed 47.33 per cent of the total sample. One fifth of the total families had income above Rs.50,000/-.

5.3 The kind and extent of unemployment

Here various types of unemployment and the extent to which various workers are underemployed is discussed. The unemployment is discussed under different heads such as open unemployment, underemployment, disguised unemployment and educated unemployment. The percentage of persons suffering from each type of unemployment and the various reasons for this are also discussed.

5.3.1 Unemployment

From Table 5.18, it can be seen that 14.95 per cent of the total labour force was unemployed. Of the total unemployed of 78, as much as 71.78 per cent was females. Unemployment percentage ranged from 7.80 per cent in males to 22.67 per cent in females. Among the different taluks,

Table 5.17 Disparity in income among sample households

Taluks	Household income classes and number of households						Total
	< 11000	110001- 25000	25001- 50000	50001- 75000	75001- 100000	>100000	
Mannarkad	2 (6.67)	8 (26.67)	15 (50.00)	4 (13.33)	-	1 (3.33)	30 (100.00)
Palakkad	1 (3.33)	6 (20.00)	16 (53.33)	3 (10.02)	2 (6.67)	2 (6.67)	30 (100.00)
Ottappalam	1 (3.33)	11 (36.67)	12 (40.00)	4 (13.33)	1 (3.33)	1 (3.33)	30 (100.00)
Alathur	2 (6.67)	8 (26.67)	14 (46.67)	4 (13.33)	1 (3.33)	1 (3.33)	30 (100.00)
Chittur	1 (3.33)	8 (26.67)	14 (46.67)	5 (16.67)	1 (3.33)	1 (3.33)	30 (100.00)
Total	7 (4.67)	41 (27.33)	71 (47.33)	20 (13.33)	5 (3.33)	6 (4.00)	150 (100.00)

Figures in parenthesis indicate percentages .

Table 5.18 Unemployment pattern of sample households

Taluk	Potential labour force			Working labour force			Unemployed labour force		
	M	F	T	M	F	T	M	F	T
Mannarkad	58	51	109	55	35	90	3 (5.17)	16 (31.37)	19 (17.43)
Palakkad	55	55	110	48	45	93	7 (12.73)	10 (18.18)	17 (15.45)
Ottappalam	52	40	92	48	33	81	4 (7.69)	7 (17.50)	11 (11.96)
Alathur	56	55	111	51	45	96	5 (5.93)	10 (18.18)	15 (13.51)
Chittur	61	46	107	58	33	91	3 (4.92)	13 (28.26)	16 (14.95)
Total	282	247	529	260	191	451	22 (7.50)	56 (52.67)	78 (14.74)

Figures in parantheses are percentages to potential

Mannarkad had the highest rate of unemployment of 17.43 per cent and Ottappalam had the least rate of 11.96 per cent. In the case of female unemployment, the highest percentage was observed in Mannarkad taluk where it was as high as 31.37 per cent and the least was seen in Ottappalam taluk. This high unemployment in Mannarkad taluk is because of the high percentage of Muslim population where the females are not usually allowed to work outside their house because of social customs. Chittur also got a female unemployment rate of 28.26 per cent. Among the male population the highest rate of unemployment is seen in Mannarkad where it is 12.73 per cent and the least is seen in Chittur taluk where it is only 4.92 per cent.

5.3.1.1 Unemployment - using NSS estimate

National Sample Survey (1986) has standardized three concepts of unemployment which have been adopted by Planning Commission also. These are, usual status, current week status and current day status. The population of age five years and above is classified into three statuses: usual status, with a reference period of 365 days preceding the survey classified a person as unemployed if he was not working, but was either seeking or available for work for a relatively longer time during the reference period. Weekly status approach classifies a person as unemployed if he has not worked for at least one hour on any day of the week, but had been seeking work or had been available for

Table 5.19 Unemployment - using NSS estimate

Name of thaluk	Usual status			Weekly status			Current day status		
	M	F	T	M	F	T	M	F	T
Mannarkkad	5.17	31.37	17.43	20.69	45.10	32.11	40.22	70.92	54.59
Palakkad	12.73	18.18	15.43	25.45	23.64	24.55	36.66	42.12	39.39
Ottappalam	7.69	17.50	11.96	21.15	32.50	26.09	36.54	53.33	43.84
Alathur	8.93	18.18	13.51	26.79	30.91	28.83	41.07	50.30	45.65
Chittur	4.92	28.26	14.95	24.59	41.30	31.78	42.90	54.35	47.82
Total	7.80	22.67	14.74	23.76	30.36	26.84	39.95	56.01	47.45

work at any time during the week. The current day status rate is the ratio of unemployed days per week (seeking or available for work) to the total labour supply per week (working plus seeking plus available days).

The values on unemployment according to the three concepts in each taluk and for the whole district is illustrated in Table 5.19. It can be seen that the usual status unemployed are 14.74 per cent, weekly status unemployed are 26.84 per cent and the current day status unemployed are 47.45 per cent for the whole district. The rates of female unemployment are higher than that of males according to all the three different estimates.

Among the different taluks, Mannarkad had the highest rate of unemployment according to all the three criteria. Palakkad had the second largest percentage of usual status unemployed persons but has the least percentage of weekly status unemployed and current day status unemployed person. This maybe due to more number of days employed by workers in that particular week.

5.3.2.1 Underemployment

The underemployment per worker in mandays is given in Table 5.20. The underemployment per worker in mandays are obtained by subtracting the average number of days they are employed per year from 300. It can be seen that

Table 5.20 Underemployment pattern in sample households (No. of days per worker)

Name of Taluk	Cultivators		Agricultural labourers		Livestock, fishing, forestry and other activities		Manufacturing, processing, servicing in household industry		Manufacturing, processing, servicing in other than household industry	
	M	F	M	F	M	F	M	F	M	F
	(1)		(2)		(3)		(4)		(5)	
Mannarkad	183.40	219.75	177.50	212.75	169.00	210.00	48.20	85.00	62.00	-
Palakkad	135.42	212.50	166.59	143.20	168.50	174.86	82.00	57.67	45.25	62.00
Ottappalam	143.00	222.29	144.75	157.36	-	156.25	29.00	49.20	29.00	-
Alathur	155.33	206.50	145.74	133.93	139.00	169.57	37.00	54.20	-	45.00
Chittur	167.50	190.75	157.38	148.00	-	159.50	58.00	55.60	47.00	44.67
Total	159.77	212.27	156.67	157.48	161.25	177.28	45.91	55.96	43.73	47.29

Table 5.20 Contd.....

Name of Taluk	Construction		Trade and Commerce		Transport, storage and communication		Other services	
	M	F	M	F	M	F	M	F
	(7)		(8)		(9)		(10)	
Mannarkad	109.75	113.20	8.00	0.00	-	-	13.33	23.50
Palakkad	78.60	106.00	0.00	24.00	6.00	-	0.00	14.40
Ottappalam	68.00	75.50	2.25	0.00	0.33	-	11.00	36.00
Alathur	75.33	82.83	14.60	-	37.00	-	10.17	26.00
Chittur	87.12	104.00	0.00	7.50	23.00	-	10.00	30.50
Total	82.89	101.87	1.96	5.20	13.25	-	9.21	22.85

underemployment was maximum among female cultivators which accounted for 212.27 days for the whole district. The underemployed mandays in the case of male cultivators in the district accounted for 159.77 days. Among the agricultural labourers the underemployed mandays were close to each other for men and women being 156.67 and 157.58 days for male and female workers respectively. The high underemployment among cultivators and agricultural labourers was mainly the result of the seasonal nature of agriculture. The huge underemployment among female cultivators was because they help in cultivation only during the busy cropping season and the rest of the time they are engaged in their household duties. The underemployed mandays was to the tune of 160 days among workers having livestock enterprises and this is mainly because most the farms had only one or two animals which mostly required only half a day employment.

Underemployed mandays was very negligible in case of workers in trade and commerce where it was only 1.96 days for male and 5.20 days for females respectively. Around 50 mandays underemployment can be seen in both sexes in manufacturing processing servicing in household industries and in other than household industries. The underemployment is still higher in the case of construction workers which worked out to 82.89 days and 101.57 days for male and female respectively. In other services the

underemployment among male workers was 9.21 and among female workers it was 22.85 mandays.

Among the different taluks, Mannarkad had the highest rate of underemployment of 183.40 days in case of male cultivators and Palakkad has the least of 135.42 days. Among female cultivators the underemployed mandays accounted for 190.75 in Chittur whereas it was as high as 222.29 mandays in Ottappalam. In case of agricultural labourers, the lowest rate of male underemployment was seen in Ottappalam (144.75 mandays) and the highest was in Mannarkad (177.50 mandays). Among female agricultural labours also Mannarkad had the highest rate of underemployment of 212.75 mandays. It was only 133.93 days in case of Aalathur. This high male and female underemployment in Mannarkad can be attributed to the relatively small cultivated area in this taluk. Moreover in Mannarkad low land area is negligible which usually employs more labourers. In case of livestock, forestry and fishing occupations, in almost all the taluks the workers were underemployed for more than 150 days in an year.

In household industry the male underemployment was as low as 29 days in Ottappalam and it went upto 82 days in Palakkad. Female underemployment in this was around 50 days in almost all the taluks except Mannarkad where it was 85 days. In case of construction workers, male

underemployment ranged from 68.00 days in Ottappalam to 113.20 days in Mannarkad. In trade and commerce, transport, storage and communication and in other services full employment or nearly full employment is seen in almost all the taluks.

It can be seen from the Table that, the cultivators are underemployed for nearly 150 days for male and female category. But it is noted that in order to cultivate the whole land they own, they require only 150 labour days. When we asked them, whether they are willing for additional wage employment, certainly in most cases the answer was no. Because of various social conventions they are not ready for wage employment. In the case of female cultivators they undertake cultivation to help during the busy cropping seasons and they are also not ready to work on wage basis in other firms.

In the case of agricultural labours even though they are willing for additional work because of the seasonal nature of agriculture they could not find work in this lean period. Most of the agricultural workers do not know any other skill needed work which force them to be unemployed. In most of the cases the agricultural workers who took cultivation as their secondary activity which also coincided with their main occupational duty, which leads to non-availability of these agricultural labours in the busy seasons.

In the case of livestock, fishing and forestry activity most of the workers who were surveyed took up livestock rearing and most of them got one or two and at the maximum three animals in their farms. The rearing of these two animals required only half a day employment and this also is carried out by two or three members in the family. In the case of workers in other occupation they are employed for an average 250 days in an year. They got 52 Sundays, 12 second Saturdays, 18 government holidays and also 15 earned leaves which in turn forced them to work only for 270 days. So fixing objective norm of 300 days of full employment for these workers has to be reconsidered.

5.3.2.2 Underemployed mandays

Total underemployed mandays in the entire district and in each taluk are given in Table 5.21. The figures have been obtained by deducting the total number of days they are employed from the total working days available to them. Here the total number of working days available per person is fixed as 300. The total underemployed mandays for the whole district worked out to 52,292 mandays and with in this, 49.16 per cent was the share of female workers. Among the different taluks the total underemployed mandays was the highest in Mannarkad taluk and of the total underemployed mandays, Mannarkad accounted for 24.17 per cent. Ottappalam taluk accounted for only 16.12 per cent.

Table 5.21 Talukwise total underemployment of sample households

Taluk	Underemployed mandays			Percentage of underemployed mandays in each Thaluk		
	M	F	T	M	F	T
Mannarkad	6369 (50.40)	6269 (49.60)	12638 (100.00)	23.96	24.39	24.17
Palakkad	4132 (42.15)	5670 (57.85)	9802 (100.00)	15.54	22.06	18.74
Ottappalam	3936 (46.68)	4496 (53.32)	8432 (100.00)	14.81	17.49	16.12
Alathur	5432 (49.57)	5526 (50.43)	10958 (100.00)	20.39	21.50	20.96
Chittur	6716 (64.19)	3746 (35.81)	10462 (100.00)	25.26	14.57	20.01
Total	26555 (50.84)	25707 (49.16)	52292 (100.00)	100.00	100.00	100.00

Female underemployment was also very high in Mannarkad and low in Chittur taluk, while male underemployed mandays was the highest in Chittur and the lowest in Ottappalam taluk.

Among the different taluks the percentage underemployed mandays was higher among females and in Mannarkad and Chittur taluks it was higher among males. In Chittur taluk female underemployed mandays was low, as it constituted only 35.81 per cent of the total underemployed mandays.

5.3.2.3 Underemployed mandays among different workers

It can be seen from Table 5.22 that the underemployed mandays are highest among agricultural labourers followed by cultivators. Of the total 52292 mandays 42.15 per cent was accounted for agricultural labourers. But the case of cultivators was still worse because eventhough they constituted only 21.51 per cent of the total labour force, 33.35 per cent of the total underemployed mandays was among them. Of the total workers 6.81 were engaged in trade and commerce industry but they accounted for only 0.31 per cent of the total underemployed mandays. Sex wise details of underemployed man days among the different workers are also shown in the table.

Table 5.22 Categorywise underemployment in sample households

Occupational categories	Underemployed mandays		
	M	F	T
Cultivators	9586.00 (36.06)	7854.00 (30.55)	17440.00 (33.35)
Agricultural labourers	12377.00 (46.56)	9663.00 (37.59)	22040.00 (42.15)
Livestock, fishing, forestry and other activities	645.00 (2.43)	4446.00 (17.29)	5091.00 (9.74)
Manufacturing, processing, servicing in household industry	505.00 (1.90)	1399.00 (5.44)	1904.00 (3.64)
Manufacturing, processing, servicing in otherthan household industry	656.00 (2.47)	331.00 (1.29)	987.00 (1.89)
Construction	2321.00 (8.73)	1681.00 (6.54)	4002.00 (7.65)
Trade and Commerce	122.00 (0.46)	39.00 (0.15)	161.00 (0.31)
Transport, storage and communication	106.00 (0.40)	-	106.00 (0.20)
Other services	267.00 (1.00)	294.00 (1.14)	561.00 (1.07)
Total	26585.00 (100.00)	25707.00 (100.00)	52292.00 (100.00)

Figures in parenthesis indicate percentages

5.3.2.4 Pattern of underemployment according to workers

The various degrees of underemployment among different workers can be seen from Table 5.23. As much as 80 per cent of the male cultivators were severely underemployed and ten per cent were moderately underemployed and another ten per cent was very severely underemployed. Among female cultivators about 60 per cent were very severely underemployed and 37.84 per cent severely underemployed. Among agricultural labourers the rates of severely underemployed workers were 73.42 per cent for males and 65.57 per cent for females respectively. It was also noted that 16.46 percent of male agricultural labourers and 19.67 per cent of the female agricultural labourers were moderately underemployed. The percentages of agricultural labourers affected by very severe underemployment were 10.13 per cent for male and 14.75 per cent for female respectively. In livestock, fishing and forestry 100 per cent of the male workers and 72 per cent of the female workers were severely underemployed. In this three group of workers, discussed so far, no one was at full employment or at near full employment level.

In manufacturing, processing, servicing in household industry and other than household industry and in construction 67 to 92 per cent of both male and female workers were moderately underemployed. This underemployment is because of various reasons. In construction industry

Table 5.23 Pattern of underemployment in different categories

Category	Cultivators		Agricultural labourers		Livestock, fishing, forestry and other activities		Manufacturing, processing, servicing in household industry		Manufacturing, processing, servicing in other than household industry	
	M	F	M	F	M	F	M	F	M	F
	(1)		(2)		(3)		(4)		(5)	
Fully employed	-	-	-	-	-	-	-	-	1 (6.67)	-
Near full employment	-	-	-	-	-	-	2 (18.18)	2 (8.00)	4 (26.67)	1 (14.29)
Moderately under-employed	6 (10.0)	1 (2.70)	13 (16.46)	12 (19.67)	-	1 (4.00)	9 (81.82)	23 (92.00)	10 (66.67)	6 (85.71)
Severely under-employed	48 (80.0)	14 (37.84)	58 (73.42)	40 (65.57)	4 (100.0)	18 (72.00)	-	-	-	-
Very severely under-employed	6 (10.0)	22 (59.46)	8 (10.13)	9 (14.75)	-	6 (24.00)	-	-	-	-
Total	60 (100.0)	37 (100.0)	79 (100.0)	61 (100.0)	4 (100.0)	25 (100.0)	11 (100.0)	11 (100.0)	15 (100.0)	7 (100.0)

Contd.....

Table 5.23 Contd.....

Category	Construction		Trade and commerce		Transport, storage and communication		Other services		Total	
	M	F	M	F	M	F	M	F	M	F
	(6)		(7)		(8)		(9)		(10)	
Fully employed	-	-	10 (38.46)	2 (40.00)	3 (37.50)	-	13 (44.83)	-	27 (10.38)	2 (1.05)
Near full employment	-	-	14 (53.85)	2 (40.00)	2 (25.00)	-	13 (44.83)	11 (84.62)	35 (13.46)	16 (8.38)
Moderately underemployed	26 (92.86)	16 (88.89)	2 (7.69)	1 (20.00)	3 (37.50)	-	3 (10.34)	2 (15.38)	72 (27.69)	62 (32.46)
Severely under- employed	2 (7.14)	2 (11.11)	-	-	-	-	-	-	112 (43.08)	74 (38.74)
Verely severely underemployed	-	-	-	-	-	-	-	-	14 (5.38)	37 (19.37)
Total	28 (100.0)	18 (100.0)	26 (100.0)	5 (100.0)	8 (100.0)	-	29 (100.0)	13 (100.0)	260 (100.0)	191 (100.0)

June, July and the first half of August are lean periods because of heavy rains. In household industry and in other than household industry because of various reasons they got only an average 21 or 22 days employment per month. In almost all other cases the moderately underemployed persons were very few and none was suffering from severe or very severe underemployment.

5.3.3 Pattern of employment and unemployment

The pattern of employment, unemployment and underemployment in different taluks and for the whole district can be seen from in Table 5.24. Only 5.48 per cent of the potential labour force was fully employed and 14.74 per cent of them were unemployed. It can also be seen that among the total unemployed persons about 72 per cent was females. It may also be noted that 9.64 per cent of the potential labour force was at near full employment while 35.16 per cent was severely underemployed and 9.64 per cent very severely underemployed.

Among different taluks, unemployment was the highest in Mannarkad (17.45 per cent) and least in Ottappalam (11.96 per cent). Persons affected from very severe underemployment was also high in Mannarkad (19.27 per cent) and it was the least in Chittur taluk (4.67 per cent). The persons affected from very severe underemployment in Palakkad, Ottappalam and Aalathur taluks were 7.27, 10.87

Table 5.24 Pattern of employment and unemployment

Category	Mannarkad			Palakkad			Ottappalem			Alathur			Chittur			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
	(1)			(2)			(3)			(4)			(5)			(6)		
Fully employed	4	1	5 (4.58)	12	-	12 (10.91)	8	1	9 (9.78)	3	-	3 (2.70)	-	-	-	27 (9.57)	2 (0.08)	29 (5.48)
Near full employment	11	2	13 (11.93)	5	7	12 (10.91)	7	1	8 (8.70)	7	4	11 (9.91)	5	2	7 (6.54)	35 (12.41)	16 (6.48)	51 (9.46)
Moderately under-employed	11	5	16 (14.68)	12	15	27 (24.55)	15	11	26 (28.26)	15	18	33 (29.73)	19	13	32 (29.91)	72 (25.53)	62 (25.10)	134 (25.33)
Severely under-employed	22	13	35 (32.11)	18	16	34 (30.91)	17	11	28 (30.43)	24	18	42 (37.84)	31	16	47 (43.93)	112 (39.72)	74 (29.96)	186 (35.16)
Very severely under-employed	7	14	21 (19.27)	1	7	8 (7.27)	1	9	10 (10.87)	2	5	7 (6.31)	3	2	5 (4.67)	14 (4.96)	37 (14.98)	51 (9.64)
Unemployed	3	16	19 (17.43)	7	10	17 (15.45)	4	7	11 (11.93)	5	10	15 (15.51)	3	13	16 (14.95)	22 (7.80)	56 (22.67)	78 (14.74)
Total	58	51	109 (100.0)	55	55	110 (100.0)	52	40	92 (100.0)	56	55	111 (100.0)	61	46	107 (100.0)	282 (100.0)	247 (100.0)	529 (100.0)

and 6.31 per cent of the potential labour force in the respective taluks. In almost all the taluks except Chittur and Aalathur about 31 per cent of the labour force was affected by severe underemployment while it was 37.84 percent for Aalathur and 43.93 per cent for Chittur taluk. In Chittur taluk 29.91 per cent of the labour force was moderately underemployed while it was only 14.68 per cent in Mannarkad. In Palakkad 10.91 per cent of the labour force was fully employed while no one was fully employed in Chittur taluk. The fully employed workers in other taluks, Mannarkad, Ottappalam and Aalathur were 4.58, 9.78 and 2.70 per cent respectively.

5.3.4 Disguised unemployment

As suggested by Pravin Visaria (1976) the measurement of disguised unemployment is not only difficult but also of relatively limited operational interest. Because of the acceleration of population growth there is little prospect before us of withdrawing workers engaged in agriculture to non-agricultural activities. The goal of absorbing the net additions to the labour force in non-agricultural operations presents a formidable task in terms of required investment. It is also noted that disguisedly unemployed labour represents an unutilized potential resource but the removable surplus persons after allowing for the seasonal and fractional components appears to be limited. Also as pointed out by Raj (1950) the savings and/or investment

potential of the unutilized labour implicit in the existence of disguised unemployment tends to be limited for various reasons. Apart from the possible non-compatibility between available labourers and requirement from a technical point of view or skill, there are limitations to the extent to which family and village ties would permit the mobilization of surplus labour.

So here more importance is given to the measurement of visible underemployment. It has greater and immediate social relevance because it can indicate the actual need and nature of supplementary work opportunities that should be created. A detailed results and discussions on them are already cited in this chapter.

Mehra (1966) and some other scientists estimated the disguised unemployment by calculating the labour intensity in different farms. It is clear that the labour intensity in different farms depends upon a number of factors viz, the type of soil, the crop grown, the variety of crop, the different cultivation operations undertaken etc. So it is not meaningful to compare the labour intensity in different fields.

5.3.5 Seasonal unemployment

The seasonal nature of the unemployment for various workers is illustrated in Table 5.25. It can be seen from

Table 5.25 Seasonal unemployment pattern in sample households

Months	Cultivators		Agricultural labourers		Livestock, fishing, forestry and other activities		Manufacturing, processing, servicing in household industry		Manufacturing, processing, servicing in other than household industry	
	M	F	M	F	M	F	M	F	M	F
	(1)		(2)		(3)		(4)		(5)	
Chingam (Aug-Sep)	7.43	3.94	10.65	8.97	12.00	10.16	21.09	20.32	19.40	21.00
Kanni (Sep-Oct)	16.71	9.76	15.94	16.72	11.50	10.36	20.91	21.28	21.33	21.14
Thulam (Oct-Nov)	13.93	11.46	17.13	16.66	11.50	10.24	19.18	21.84	23.40	20.86
Vrichikom (Nov-Dec)	17.80	10.54	18.06	16.87	11.25	10.04	21.64	19.69	20.00	20.71
Dhanu (Dec-Jan)	15.87	9.76	11.92	13.60	12.00	10.04	21.91	19.44	20.13	20.14
Makaram (Jan-Feb)	5.85	4.30	9.58	10.13	11.50	10.12	22.55	19.96	23.73	21.71
Kumbham (Feb-Mar)	6.35	3.73	6.75	7.41	11.25	10.24	22.27	19.28	21.87	21.57
Meenam (Mar-Apr)	5.68	5.02	6.96	8.03	12.00	10.20	19.36	21.24	21.40	20.86
Medam (Apr-May)	8.18	4.92	6.25	7.51	11.50	10.16	20.36	20.64	21.20	21.14
Edavam (May-Jun)	17.48	10.71	17.32	16.06	11.25	10.16	20.72	20.36	21.27	21.57
Midhunam (Jun-Jul)	16.00	10.51	16.83	16.18	11.50	10.10	21.82	20.44	22.13	20.86
Karkidakom (Jul-Aug)	6.35	4.38	7.50	5.65	11.50	10.00	22.27	19.60	20.40	21.14

Table 5.25 contd...

Months	construction		Trade and commerce		Transport, storage and communication		Other services	
	M	F	M	F	M	F	M	F
	(6)		(7)		(8)		(9)	
Chingam (Aug-Sep)	18.89	19.06	24.81	25.20	22.75	-	21.38	22.15
Kanni (Sep-Oct)	22.50	20.22	24.92	24.47	24.13	-	26.48	24.00
Thulam (Oct-Nov)	22.89	20.67	25.04	25.00	24.50	-	26.76	22.77
Vrichikom (Nov-Dec)	22.71	21.17	24.62	25.80	24.50	-	26.07	24.15
Dhanu (Dec-Jan)	22.68	20.67	24.69	24.60	23.50	-	26.28	24.00
Makaram (Jan-Feb)	22.54	20.44	25.04	24.20	23.88	-	22.34	22.46
Kumbham (Feb-Mar)	19.39	20.94	24.58	24.00	24.25	-	21.76	23.69
Meenam (Mar-Apr)	18.29	19.78	25.08	24.40	23.13	-	22.41	23.54
Medam (Apr-May)	10.46	10.38	24.85	25.00	23.25	-	21.41	22.62
Edavam (May-Jun)	10.21	9.11	24.92	23.60	24.13	-	25.45	22.77
Midhunam (Jun-Jul)	9.68	10.72	24.81	23.60	24.38	-	25.38	22.85
Karkidakom (Jul-Aug)	16.85	13.50	24.69	25.00	24.38	-	25.07	22.54

the table that the seasonal nature of unemployment mostly affected cultivators, agricultural labourers and those in construction industries. For other workers not much of seasonal variation in employment can be found. The difference in number of days employed in different months by cultivators and agricultural labourers was mainly because of the seasonal nature of agriculture. Here for *Kanni*, *Thulam*, *Vrichikom*, *Dhanu*, (mid September to mid-January) *Edavam* and *Mithunam* (mid-May to mid-July) months they got an average 15-18 days employment per month and all the other months are lean periods when they got only 6.8 days employment. Since the figures in each column are the average of 40-80 members the average tends to be low because some person work only for 8 or 10 days in a month while some others for 25-27 days.

Construction industry is also affected by the seasonal factors during the months of *Medam*, *Edavam*, *Mithunam* and *Karkidakam* (mid April to mid August) while water scarcity is the problem during the months of *Medam* and part of *Edavam*. Job opportunity tends to decrease in all the other months mentioned above due to heavy rains and the number of days employed tends to be low.

5.3.6 Educated unemployment

It can be seen from Table 5.25 that 26.32 per cent of the total educated people were unemployed. Educated

Table 5.26 Educated Unemployment

Education	No. of educated people			Unemployed people			Percentage of educated unemployed		
	M	F	T	M	F	T	M	F	T
Secondary	68	75	143	12	18	30	17.65	24.00	20.98
Higher secondary	38	36	74	3	18	21	7.89	50.00	28.38
Technical education, graduation and above	15	15	30	6	8	14	40.00	53.33	46.67
Total	121	126	247	21	44	65	17.36	34.92	26.32

unemployment was much higher among females. It was only 17.36 per cent among men, whereas it was 34.92 per cent among women. The relatively low mobility of the female labour is the main reason for the higher rate of unemployment among them. It can also be seen that as the educational status improves the unemployment rate also increases. About 46.67 per cent of the graduates and technically qualified people were unemployed while it was only 20.28 per cent for secondary educated people. This is mainly because as education increases they are in search of a high status job which now a days is very difficult to obtain.

5.4 Relationship between unemployment/underemployment and some socio-economic variables

Mere estimation of the magnitude of unemployment/underemployment does not help in solving the problem of rural unemployment. An indepth study of the variation and causes of unemployment/underemployment is a must in determining the different employment assurance programmes that have to be implemented in rural areas. For this, the relationship between unemployment/underemployment and the different socio-economic variables have to be studied.

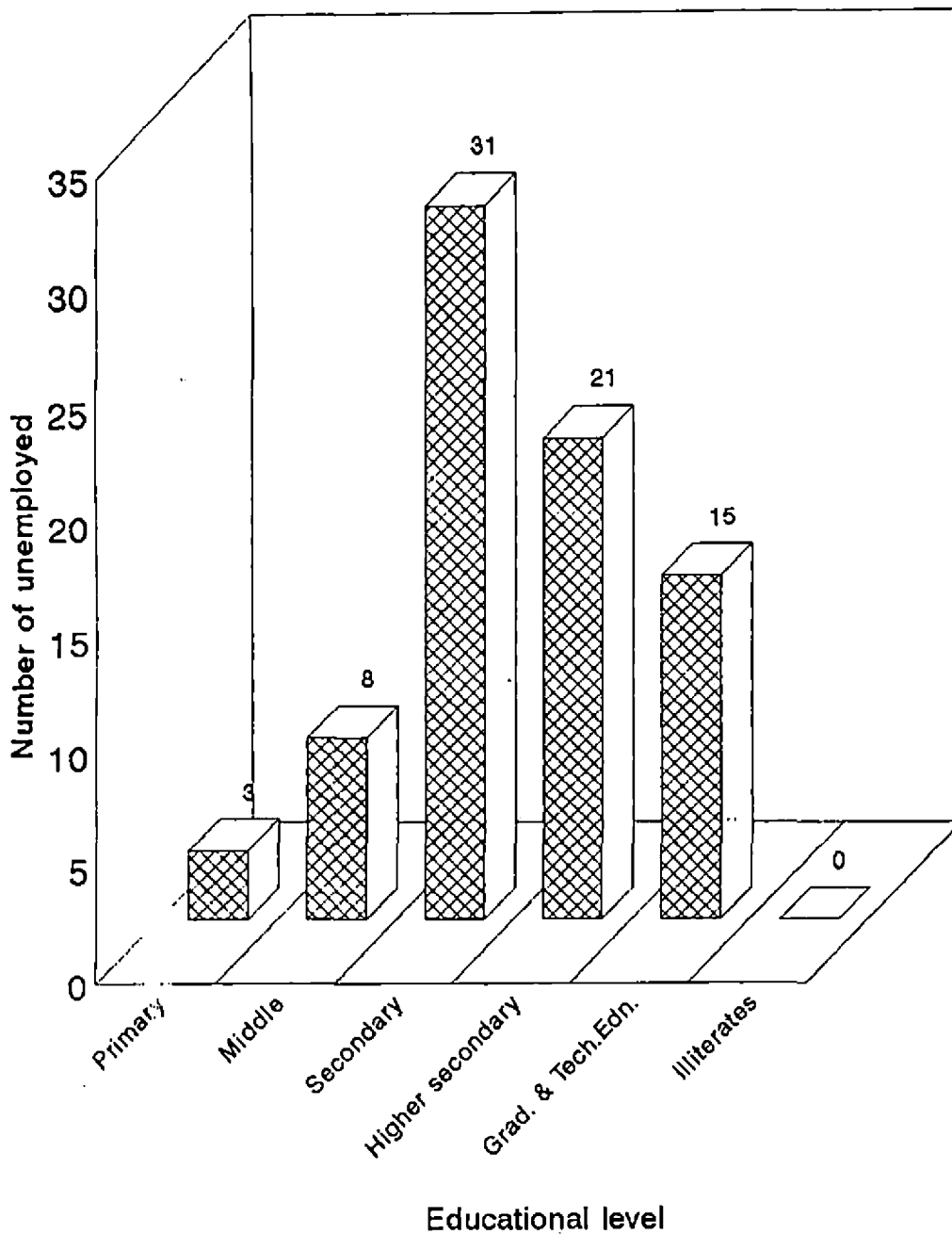
5.4.1 Relationship between sex and unemployment

The relationship between unemployment and sex is illustrated in Table 5.27. It can be seen that 71.79 per cent of the total unemployed are females. The female

Table 5.27 Gender difference in unemployment

Name of thaluk	Unemployment			Percentage		
	M	F	T	M	F	T
Mannarkkad	3	16	19	15.79	84.21	100.00
Palakkad	7	10	17	41.18	58.82	100.00
Ottappalam	4	7	11	36.36	63.64	100.00
Alathur	5	10	15	33.33	66.67	100.00
Chittur	3	13	16	18.75	81.25	100.00
Total	22	56	78	28.21	71.79	100.00

Fig.6 Educational qualification of the unemployed



unemployment rate exceeds the male unemployment rate in all the five different taluks in the district. The highest rate of female unemployment among the different taluk is seen in Mannarkad (84.21 per cent) and the lowest in Palakkad (58.82 per cent).

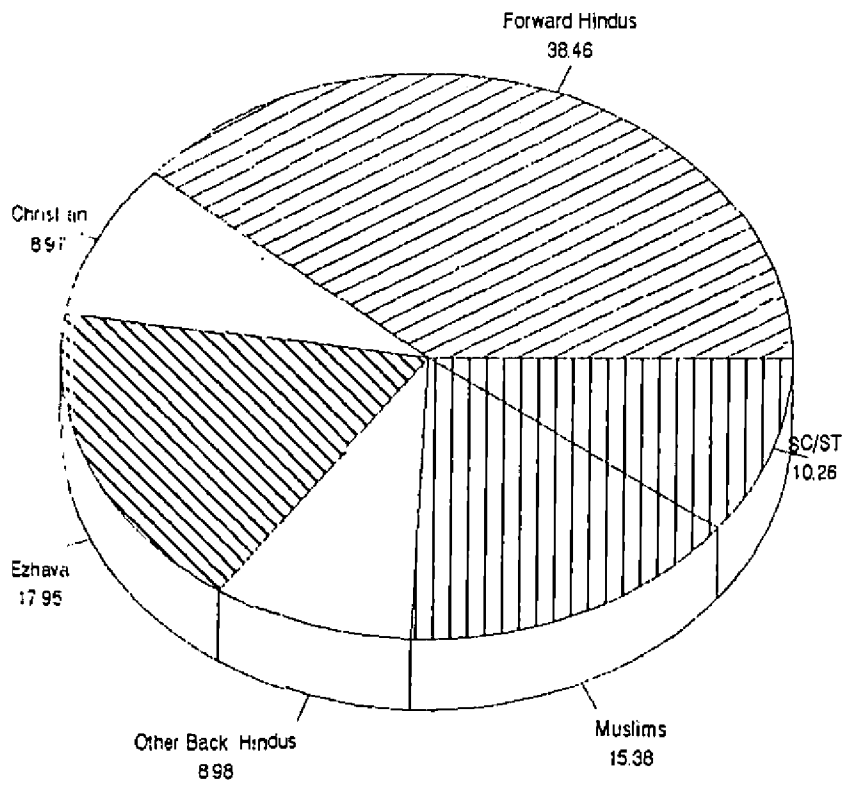
5.4.2 Educational qualifications of the unemployed

Of the total 78 unemployed persons three have got secondary education, 21 have higher secondary education and 14 are graduates or technical educated people. This means that 83.33 per cent of the total unemployed have an educational level above S.S.L.C. Among the unemployed there were no illiterates and those who had only primary education accounted for only 2.56 per cent and those with only middle school level only 11.53 per cent. To get a more clear picture see Figure No.4. It is clear that most of the unemployed persons are educationally qualified ones. This high rate of unemployment among educationally qualified one is because of their expectation to get some government job which has status in the society and they are reluctant to take up cultivation, livestock rearing or some self employment as their income earning activity.

5.4.3 Caste wise distribution of the unemployed

From figure 5.5 it can be seen that about 38.46 percent of the unemployed were from forward castes. Eventhough the forward caste accounted for only 14.67 per

Fig.7 Castewise distribution of the unemployed



cent of the total households. This is mainly because of the high rate of female unemployment in the forward castes where the females are reluctant to do manual work after attaining some basic education. Within the ezhava community, the rate of unemployment was 17.94 per cent and among muslims it was 15.38 per cent. It was also noted that 10.26 per cent of the other backward community and 8.97 per cent of the scheduled caste/scheduled tribes labour force were unemployed.

5.4.4 Relationship between age and unemployment

The relationship between age and unemployment can be seen in Fig.6. It can be noted that the unemployment increases as age increases upto 30 years and then it decreases upto 40 years of age. Above 40 years of age the unemployment shows an increasing trend. It was found that the unemployment was common among the youth and it was less common among old people. This was mainly because most of the youth are in search of a job which yields them satisfaction. But after 25 or 30 years of age, because of chronic unemployment they are forced to choose any work irrespective of their interest in some particular field.

5.4.5 Relationship between family income and unemployment

The relationship between family income and unemployment is expressed in Fig.7. It can be seen that of

Fig.8 Relationship between age and unemployment

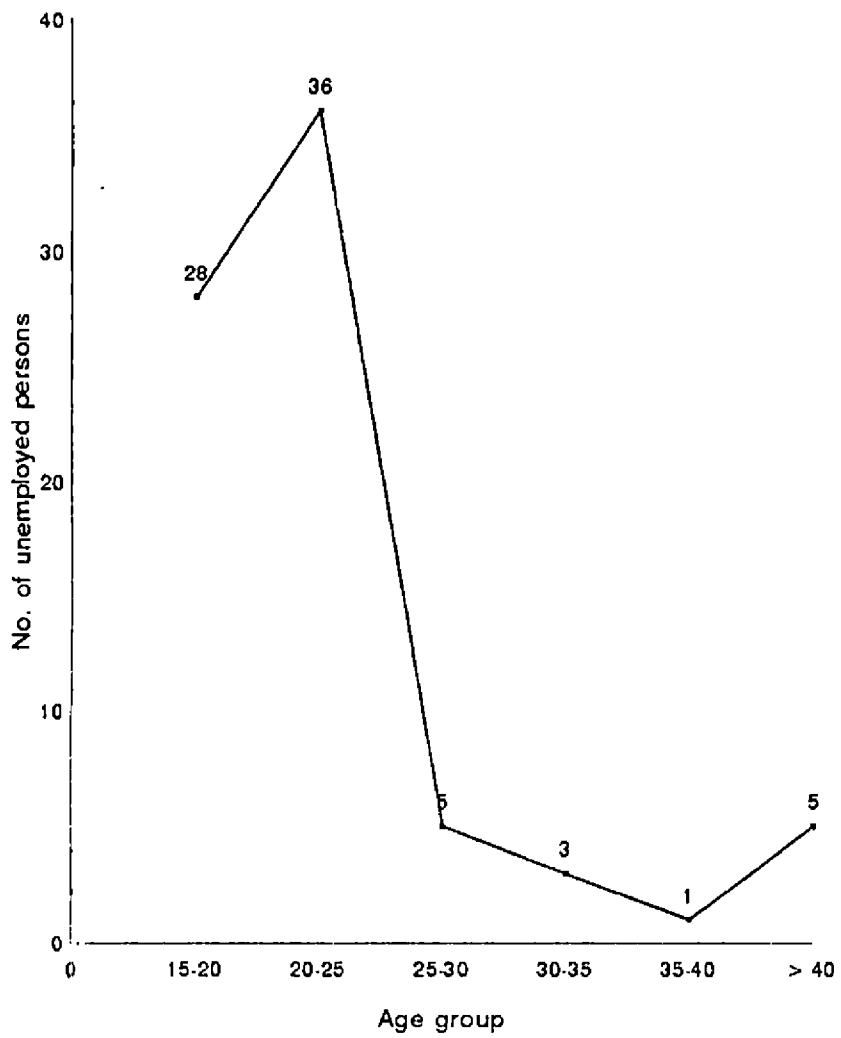
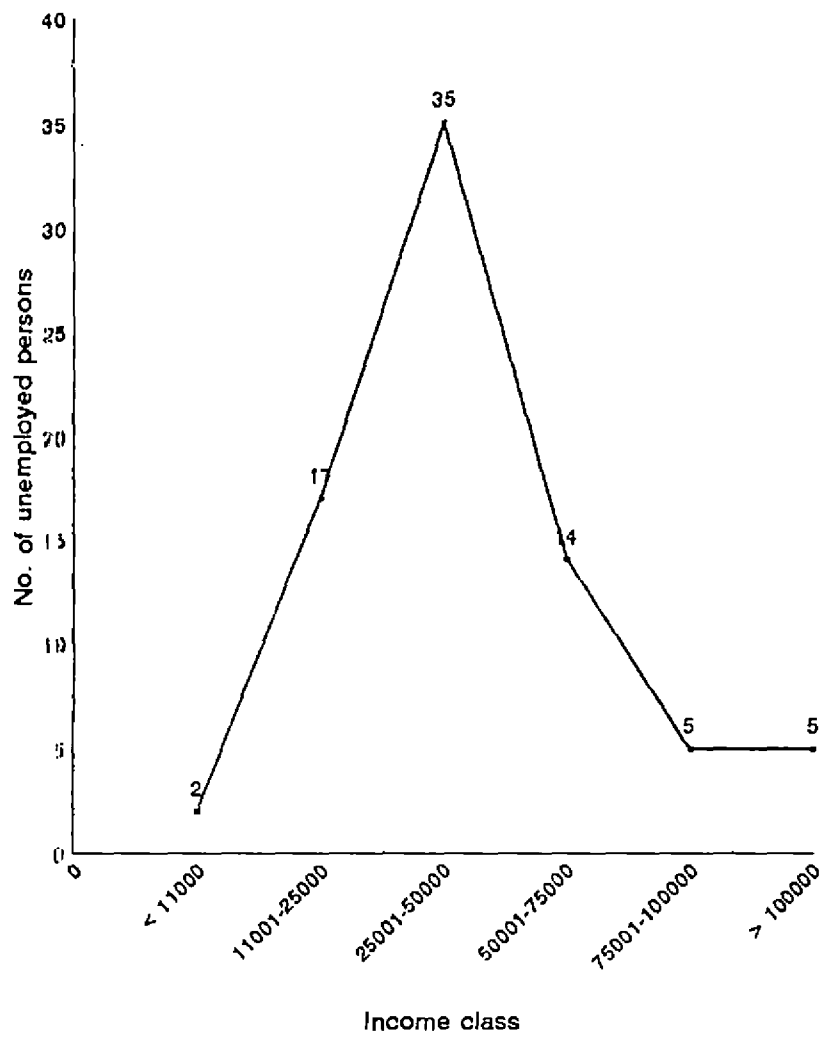


Table 5.28 Values on simple regression analysis on different variables

Variable	Correlation co-efficient	Significance
Education	-0.488	*
Age	0.237	*
Total land holdings	-0.023	NS
Attitude score	-0.392	*
Family income	-0.374	*

Fig.9 Relationship between family income and unemployment



the total seventyeight unemployed persons, thirtyfive are in the middle income group, that is those who have a family income of Rs. 25,001 - 50,000. Seventeen of them have a family income of Rs.11,007 - 25,000 and fourteen of them have a family income of Rs.65,001 - 75,000. There are only two unemployed persons who are below the poverty line of Rs.11,000/-. Five of the unemployed have a family income of above Rs.1,00,000/-.

5.4.6 Relationship between underemployment and socio-economic variables

Simple correlation was worked out to find the extend of relation of underemployment with education, age, total land holdings and family income. The correlation coefficient and their significance are provided in Table 5.28. It can be seen that the correlation is significant except in the case of the holding size. All the variables except age have negative correlation coefficient. This indicates that as the education, family income and the score on attitude towards employment increases, the underemployment decreases. Whereas the age has a positive correlation which indicates that as the age increases underemployment also increases. Holding size did not influence the underemployment.

Table 5.29 Mean Table - Underemployment and sex

Variable	Number	Mean and Standard error
Male	191	136.06 ± 5.29 ^a
Female	260	102.89 ± 4.47 ^b

Table 5.30 Mean Table - Underemployment and caste

Variable	Number	Mean and Standard error
Forward Hindus	52	64.92 ± 9.92 ^a
Christian	32	103.91 ± 12.65 ^b
Ezhava	142	123.64 ± 6.00 ^{cd}
Muslims	79	142.32 ± 8.05 ^d
OBC	42	110.67 ± 11.04 ^{cb}
SC/ST	104	120.11 ± 7.02 ^{cb}

To find the effect of sex and caste on underemployment analysis of variance was carried out and the results are presented in Table 5.29 and 5.30. Analysis of variance revealed that males and females differed significantly with regard to underemployment. It may be noted that females are more underemployed than males. When analysis of variance was done to test the differences among castes with respect to underemployment, it was observed that there was significant difference among them. Muslims had maximum underemployment and are on par with ezhava. The underemployment was at the lowest among forward hindus.

S U M M A R Y

S U M M A R Y

The study "Rural unemployment in Palakkad district" is intended to assess the magnitude of unemployment of various types, and to bring out a detailed socio-economic profile of the unemployed. The study will help to understand the nature and extent of the problem and this understanding could lead to formulation and implementation of appropriate remedial measures.

The study was based on primary data generated through a sample survey. Multistage random sampling technique was adopted for this purpose. Two panchayats were randomly selected from each of the five thaluks in the district. From each of the ten panchayats thus selected, one ward was randomly selected. From each of the ten wards, 15 households were randomly selected and detailed information on employment, income and other socio-economic aspects were collected from these households using a pre-tested interview schedule. The data collected were analysed using appropriate statistical techniques.

The results indicated that there was not much wide variation between people of different taluks in respect of their socio-economic status. The average family size of the whole district was 5.43 and so also 54 per cent of the total households had 5-6 members in their home. It was

also found that more than 60 per cent of the households belong to backward classes. Among the different thaluks Aalathur had the highest number of persons of 177 and Ottappalam had the least 151 persons in the sample households. The literacy level for the whole district is 77.02 per cent.

The economic status of family members indicated that the maximum number of earners per household was in Aalathur thaluk which was 3.2 per cent and the least in Ottappalam thaluk which was only 2.7 per cent. The earners per household for the whole district was 3.01 per cent. It was found that 67.67 per cent of the total population were the potential labour force. It was also found that 85.26 per cent of the potential labour force were working and the labour force participation rate was 92.20 per cent and 77.33 per cent for males and females respectively.

The occupational status of the working population revealed that 31.04 per cent of them were agricultural labours and 21.51 per cent cultivators. Another 6.43 per cent was engaged in livestock, forestry and fishing activity. Thus in rural areas of Palakkad almost 60 per cent of the total population had agriculture as their primary occupation. It was also noted that 10.2 per cent of the working population was engaged in construction and it was reported that percentage of workers engaged in this

activity was found to increase over the years as they get more income and more number of days of employment. The notable character of the working population was that 69.40 per cent of them had one or other type of secondary activity. It was also found that 50 per cent of the total workers who were engaged in subsidiary occupation choose cultivation and 7.67 per cent choose construction as their subsidiary occupation.

Results indicated that the male cultivators were engaged for 140.23 days in an year whereas female cultivators were engaged for only 87.73 days. Male agricultural labourers were employed for 143.83 days and female agricultural labours for 142.52 days in an year. The livestock activity offers 138.75 days for men and 122.16 days employment for women. All other activities except those in primary occupation offered more than 200 days employment per year.

The average income of the household showed that 80.90 per cent of the total income was from non-farm sources and the net farm income constitute only 19.10 per cent. Among the different types of workers the mean income per person employed was the highest among the male workers in trade and commerce and the lowest among female cultivators.

The results on the kind and extent of the unemployment showed that 14.95 per cent of the total labour force were unemployed and this ranged from 7.8 per cent in males to 22.67 per cent in females. Among the different taluks male unemployment is the lowest in Chittur (4.92 per cent) and the highest in Palakkad (12.73 per cent). With in female labour force the highest rate of unemployment was seen in Mannarkad (31.37 per cent) and the lowest in Ottappalam (17.50 per cent).

Results on underemployment showed that the underemployment is highest among female cultivators which accounted to 212.27 days and the lowest among males in trade and commerce which is only 1.96 days. The total underemployed mandays was the maximum among agricultural labourers which accounts for 22040 mandays.

The pattern of employment and unemployment showed that only 5.48 per cent of the potential labour force was fully employed and 14.74 per cent of them were unemployed. It may also be noted that 9.64 per cent of the potential labour force was at near full employment while 35.16 per cent was severely underemployed and 9.64 per cent very severely underemployed.

The results on seasonal unemployment revealed that cultivators, agricultural labours and those in construction

industries affected by this. The study on educated unemployment showed that 26.32 per cent of the total educated people are unemployed and educated unemployment is higher among females.

Suggestions and policy implications

The results of the study bring some major suggestions while implementing different employment assurance programmes.

1. The real problem in rural area is not one of unemployment but of underemployment.
2. Seasonal nature of agriculture forced people to be underemployed for a long period.
3. The high wage rate which prevails in Kerala forced the people to work only for fewer number of days.
4. The unemployment among educated people cause serious social problems.
5. Even if the labourers are underemployed they may not be willing for additional work except with in a specific location for a specific type of work at a specific wage rate.
6. The taste and interest of the unemployed persons are different and they will opt for an employment only according to their will and wishes.

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RURAL UNEMPLOYMENT IN PALAKKAD DISTRICT

**By
PRADEEP, K. S.**

ABSTRACT OF A THESIS
Submitted in partial fulfilment of the
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(AGRICULTURAL ECONOMICS)

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Kerala Agricultural University

Department of Agricultural Economics

COLLEGE OF HORTICULTURE

VELLANIKKARA, THRISSUR - 680 654

KERALA, INDIA

1998

ABSTRACT

The study was carried out in Palakkad district during the agricultural year 1994-95 to assess the magnitude of unemployment of various types and to bring out a detailed socio-economic profile of the unemployed.

Data for the study was generated through a sample survey using multistage random sampling technique. Suitable statistical techniques were employed in the analysis of data.

The economic status of family members indicated that the maximum number of earners per household was in Alathur taluk which was 3.2 per cent and the least in Ottappalam taluk which was only 2.7 per cent. It was found that 64.67 per cent of the total population was the potential labour force and 85.26 per cent of the potential labour force were working. The labour force participation rate was 92.90 per cent and 77.33 per cent for males and females respectively.

The occupational status of working population revealed that about 60 per cent of the total working labour force had agriculture as their primary occupation. It was also revealed that 69.40 per cent of the working population had one or other type of secondary activity.

The results on the kind and extent of unemployment showed that 14.95 per cent of the total labour force were unemployed and this ranged from 7.8 per cent in males to 22.67 per cent in females. Results on underemployment showed that the underemployment was highest among female cultivators which accounted to 212.27 days and the lowest among males in trade and commerce which was only 1.96 days. The results on seasonal unemployment revealed that cultivators, agricultural labourers and those in construction industries were affected by this.

The study also revealed that the real problem in rural area is not one of unemployment but of underemployment and the main cause of this underemployment is the seasonal nature of agriculture.

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