

# **URBAN UNEMPLOYMENT: A STUDY OF KOCHI CITY**

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**B.A. Prakash**

## I. Introduction

Chronic unemployment of a large portion of active labour force has been the most serious socio economic problem of Kerala during the last three decades. Available evidences suggest that the rate of urban unemployment in Kerala was very high. According to a survey conducted by the Department of Economics and Statistics(DES) in 1987, the rate of open unemployment in urban areas was 33 percent. The survey estimated that 20 percent of the male and 58 percent of the female labour force were openly unemployed in urban areas. Surveys conducted by the National Sample Survey Organisation(NSS) also suggest that the rate of urban unemployment in Kerala was very high. The 50<sup>th</sup> round survey conducted by the NSS rank Kerala as a state having the second highest rate of urban unemployment in India. Using the current daily status measure of unemployment, it was estimated that 14 percent of the male and 28 percent of the female labour force were unemployed in urban areas.

The high incidence of urban unemployment assumes significance in the context of rapid urbanisation taking place in Kerala. During the second half of the last century, the decade which witnessed rapid urbanisation in Kerala was 1980's. Between 1981 and 1991 the growth of urban population was 60.9 percent compared to 3.2 percent of the rural population. Compared to 1980's the rate of urbanisation was lower in 1990's. The 2001 census estimate the decadal growth as 7.6 percent. According to the census, the percentage of urban population in Kerala is 25.97 percent in 2001 (Kerala, Director of Census Operations, 2001). The decline in the rate of urbanisation may be attributed to the severe recession the state economy has been facing since the mid 1990's due to the large scale exodus of emigrants from the Gulf, the crisis in agricultural sector due to steep fall in the price of major crops especially coconut and rubber and the decline in investment indicated by a steep fall in credit deposit ratio and the unprecedented fiscal crisis of the state government resulting in the closure of most of the state sponsored development activities.

A review of the studies on unemployment in Kerala show that two types of literature are available on unemployment viz., unemployment surveys and studies examining the characteristics and other issues. The surveys conducted by the

DES and NSS are major sources which give the unemployment estimates for Kerala as a whole (DES Survey 1982 and DES Survey 1988). Though the latest survey gives an estimate of urban open and under employment, the survey failed to give a detailed examination of the characteristics of urban unemployment and its regional variations etc. From the NSS Surveys we get a good idea about the changing magnitude of unemployment (NSS 27<sup>th</sup>, 32<sup>nd</sup>, 38<sup>th</sup>, 43<sup>rd</sup> and 50<sup>th</sup> rounds). But the information provided in the surveys about the urban unemployment is meagre.

Though a number of scholars have studied the unemployment problem, the main focus of most of the studies was educated unemployment. The Centre For Development Studies (CDS) study was one of the earlier studies which examined the socio-economic characteristics of educated unemployed, the incidence of unemployment and interrelations between supply and demand for educated labour in Kerala (C.D.S. 1977). Another study in 1988 examined the socio-economic characteristics, incidence of unemployment and the job preferences of unemployed based on a sample survey at Trivandrum (B.A. Prakash, 1988). The subsequent studies have drawn attention to the worsening problem of educated unemployment in Kerala (Joseph Thomas, 1988 and M.A. Oommen, 1992). Another study examined the impact of expansion of education on the characteristics of the labour supply and the adjustment process given the severity of unemployment. And the study is based on a large scale survey conducted among registrants in the employment exchanges of Kerala in 1989 (Mukherjee and Issac, 1994). Though the studies have examined the issue of educated unemployment, they have not given a detailed examination of the characteristics and problems of urban unemployment. But a recent study examined educated unemployment has given more information about the characteristics, job preferences, employment perspectives of educated unemployment (E.T. Mathew, 1995). The above review suggest that the issue of urban unemployment has not received due attention from the scholars. This is the context in which we propose to conduct a study of urban employment and unemployment in Kochi city with the following objectives.

## ***Objectives***

- (1) to study the nature, characteristics and structure of urban employment.

- (2) to examine the incidence, type and characteristics of urban unemployment and
- (3) to present explanations for the high incidence of unemployment.

## **II. Conceptual Framework**

In this section we present a review of the labour force framework of International Labour Organisation (ILO) and the National Sample Survey Organisation (NSS). The ILO's labour force framework is widely used by countries all over the world. The NSS is using a conceptual framework which is similar to the ILO. The estimates of labour force and not in labour force are estimated in India by using the NSS labour force framework. In this study we follow the NSS labour force framework to measure employment and unemployment.

### **(i) ILO's Labour force framework**

On the basis of a specific set of rules, the labour force framework classifies, at a given moment of time, the population above a specified minimum age for measuring the economically active population into three mutually exclusive and exhaustive categories: employed, unemployed and not in labour force. The employed and unemployed categories together make up the labour force, or the currently active population, which gives a measure of the number of persons furnishing the supply of labour at a given moment of time. The third category(not in the labour force), to which persons below the age specified for measuring the economically active population are added, represents the population not currently active. These relationships may be expressed as:

$$\text{Population} = \text{Labour Force} + \text{Not in Labour Force}$$

and

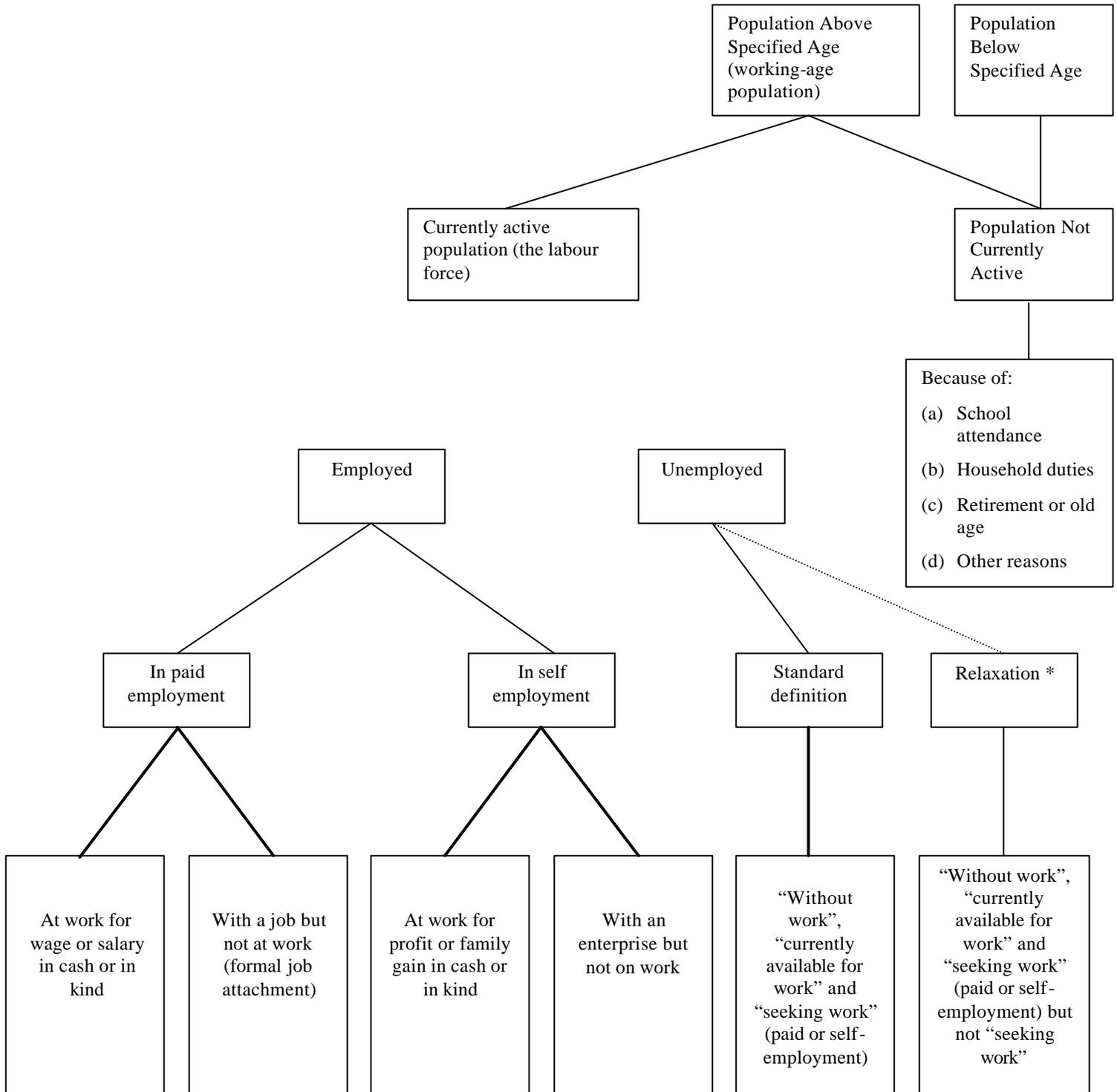
$$\text{Labour force} = \text{Employed} + \text{Unemployed}$$

ILO defines employment in terms of paid employment and self employment. Paid employment covers persons who during the reference period performed some work for wage or salary, in cash or in kind, as well as persons with a formal attachment to their job but temporarily not at work; self employment covers

persons who during the reference period performed some work for profit or family gain, in cash or in kind, and persons with an enterprise but temporarily not at work.

The definition of unemployment covers persons who during the reference period were (a) without work; (b) currently available for work; and ( c ) seeking work. These elements of the international definitions of employment and unemployment which confirm to the labour force framework are shown in Figure 1.

**Figure 1. ILO's Labour Force Frame**



Embedded in the labour force framework are certain rules for sorting the population into three basic categories (employed, unemployed and not in the labour force). These rules have three main features. The first feature is the notion of a reference period which must be short enough to reflect the labour supply situation at a specified moment of time. The second feature is the concept of activity status according to which the population is classified into the three categories on the basis of activities performed during the specified short reference period; a person must be working or more precisely, must have a job or enterprise in which he or she normally works (employed) or be seeking and/or available for work(unemployed) to be included in the labour force. The third feature of the labour force framework is the use of a set of priority rules for ensuring that each person is classified into only one of the three basic categories of the framework.

### **Reference period**

The labour force framework is designed to monitor current changes in the employment and unemployment situation, primarily on the basis of data obtained from household surveys. This means that the concepts of employment and unemployment should relate to a relatively short time period and that the measurement should be made at sufficiently frequent intervals, the frequency depending on the national statistical system and the availability of current data from other sources as well as on the seasonal patterns of employment.

The international standards identify two appropriate choices for the length of a short reference period: one week or one day. Since employment and unemployment are viewed as stock concepts, the corresponding statistics must, in principle, refer to a precise instant in time. But the nearest practical stretch of time to reflect an instantaneous situation is a day or a week.

### **Activity principle**

The activity principle of the labour force framework stipulates that a person's labour force status should be determined on the basis of what the person was actually doing during the specified short reference period. Thus, only persons who were engaged in an economic activity or who were seeking and/or available for such an

activity are to be considered for inclusion in the labour force. The scope of economic activity, in as far as it applies to the labour force framework, is, by convention, based on the concept of production of goods and services as defined by the United Nations System of National Accounts. This concept includes all activities related to market production and certain types of activities related to non-market production.

### **Priority rules**

The labour force framework uses a set of priority rules for classifying the working age population into three basic categories of the framework: precedence is given to employment over unemployment and to unemployment over economic activity. Thus, a person who is both working and seeking work is classified as employed, while a student who is attending school and also seeking work is classified as unemployed. One corollary of the priority rules is that employment always takes precedence over other activities, regardless of the amount of time devoted to it during the reference period; a person working even for only one hour during the reference period will be classified as employed on the basis of the labour force framework, though he or she may at the same time be seeking additional work or going to school.

#### **(i) Measurement of employment**

According to ILO definition of employment, the “employed” comprise all persons above the age specified for measuring the economically active population, who during a specified brief period (one week or one day) were in the following categories:

Paid employment (1) “at work”: persons who, during the reference period, performed some work for wage or salary, in cash or in kind; (2) “with a job but not at work”: persons who, having already worked in an <sup>9</sup>ent job, were temporarily not at work during the reference period but had a formal attachment to their job.

Self employment (1) “at work”: persons who, during the reference period, performed some work for profit or family gain, in cash or in 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 some specific reason.

The international standards further specify that, for international purposes, the notion of “some work” may be interpreted as work for at least one hour. The distinction between paid employment and self employment is meant to emphasise that employment covers not only work for wage or salary but also work for profit or family gain, including production for own consumption as mentioned above. The distinction also permits the use of an appropriate terminology for each of the two types of employment.

### **(ii) Measurement of unemployment**

The ILO definition of unemployment is based on three criteria to be satisfied simultaneously: “without work”, “currently available for work” and “seeking work”. Accordingly, the “unemployed” comprise all persons above the age specified for measuring the economically active population who during the reference period were:

- (a) “without work”, i.e., were not in paid employment or self employment as specified by international definition of employment.
- (b) “Currently available for work”, i.e., were available for paid employment or self employment during the reference period; and
- (c) “seeking work”, i.e., had taken specific steps in a specified recent period to seek paid employment or self employment.

The without work criterion draws the distinction between employment and non employment. “Without work” is interpreted as total lack of work, or, more precisely, as not having been employed during the reference period. Thus, a person is to be considered as “without work” if he or she did not work at all during the reference period (not even for one hour) nor was temporarily absent from work as determined by the definition of employment.

According to the international standards, persons should be seeking work to be considered as unemployed. Seeking work is defined as having taken specific steps in a specified recent period to seek paid employment or self employment. The term

“work” in the seeking work criterion is to be interpreted in the sense of economic activity as defined in the international standards. The notion of seeking work is independent from the duration and type of employment sought. Seeking work covers seeking employment, part time employment, temporary, seasonal or casual work, and in general, any type of work considered as economic activity by the international standards.

According to the international standards, persons should be available for work during the reference period if they are to be considered as unemployed. In the present context, availability for work means that, given a work opportunity, a person should be able to ready to work. When used in the context of the standard definition of unemployment, one purpose of the availability criterion is to exclude persons who are seeking work to begin at a later date, for example, students who, at the time of the survey, are seeking work to be taken up after completion of the academic year. In this situation the availability criterion serves as a test of the current readiness to start work. The availability criterion also serves to exclude other persons who cannot take up work due to certain impediments, such as family responsibilities, illness, or commitments to volunteer community services.

### **NSS’s Labour Force Framework**

In the 50<sup>th</sup> Round the NSS has used the following definitions to define employed, unemployed, labour force and not in labour force.

**(a) Workers or employed:** Persons who are engaged in any economic activity or who despite their attachment to economic activity, have abstained for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work constitute workers. Unpaid helpers who assist in the operation of an economic activity in the household farm or non farm activities are also considered as workers.

**(b) Unemployed:** 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 condition of work and remuneration are considered as those seeking or available for work as unemployed.

**(c)Labour force:** Persons who are either ‘working’ or seeking or available for work (i.e., unemployed) during the reference period constitute the labour force.

**(d)Out of labour force:** Persons who were neither working and at the same time were not seeking nor available for work during the reference period are considered to be ‘out of labour force’. The persons under this category are students, those engaged in domestic duties, rentiers, pensioners, recipients of remittances, those living on alms, infirm or disabled, too young or too old, prostitutes, smugglers etc and casual workers not working due to sickness etc. However a domestic servant who is considered as a member of the employer’s household is treated as a worker though he/she may be performing only household chores. The classification of the labour force is given below.

The NSS has classified the persons into various activity categories on the basis of the activities pursued by them during certain specified reference periods. Three reference periods are used in these survey. These are

#### Classification of Labour force and Out of Labour force

<u>Code</u>	<u>Employed</u>
11	Worked in household enterprise (self employed as an own account worker)
12	Worked in household enterprise (self employed) as an employer.
21	Worked in household enterprise as a helper.
31	Worked as regular salaried/wage employee.
41	Worked as casual labour in public works.
51	Worked as casual labour in other types of works.

<u>Code</u>	<u>Unemployed</u>
81	Seeking or available for work.

	<u>Out of labour force</u>
91	Attended educational institutions.

92	Attended domestic duties only.
93	Attended domestic duties and was also engaged in free collection of goods (vegetables, roots, firewood, etc for household).
94	Rentiers, pensioners, remittance recipients etc.
95	Not able to work due to disability.
96	Beggars, prostitutes etc.
97	Others
99	Infants of age 0-4 years.

(i) one year, (ii) one week and (iii) each day of the week. Based on these three periods three different measures are arrived at. These are termed as usual status, current weekly status and the current daily status.

#### **Classification according to usual status**

In this approach the status of activity on which a person spent relatively longer time of the preceding 365 days from the date of the survey is considered as the principal usual status activity of the person.

Employed: Accordingly, a person is considered working or employed if the person was engaged for a relatively longer time during the past year in any one or more work related activities.

Unemployed: A person is considered as 'seeking or available' for work or 'unemployed' if the person was not working but was either seeking or was available for work for a relatively longer time during the past year.

#### **Classification according to current weekly status**

For classification of persons according to current weekly status approach, they are assigned a unique activity status with reference to a period of 7 days preceding the date of survey.

Employed: According to this status, a person is considered working or employed if the person was engaged for atleast one hour on any one day of the previous week on any work related activity.

Unemployed: A person who had not worked for even one hour on any one day of the week, but had been seeking or had been available for work at any time for atleast one hour during the week days was considered 'seeking/available for work'.

### **Classification according to current daily status**

The activity pattern of people particularly in the unorganised sector is such that a person might be pursuing more than one activity during a week and sometimes even during a day. In the current daily status (cds) upto two activity statuses were assigned to a person on each day of the reference week. The unit of classification was thus 'half day' in current daily status. In assigning the activity status on a day, a person was considered working for the entire day if he had worked 4 hours or more during the day. If he had worked one hour or more but less than 4 hours he was considered working (employed) for the entire day and seeking/available for work(unemployed) or not available for work (not in labour force) for the other half day depending on whether he was seeking /available for work or not. The aggregate of person days classified under the different activity categories for all the seven days gave the distribution of person days by activity category during an average week over the survey period of one year.

In short, the current day status rate of unemployment 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).

### **Unemployment Rate**

Unemployment rate is defined as the number of persons per 100 persons in the labour force.

### **Definition of an urban area**

In 1991 and 2001 censuses, the following definition is used to define an urban area.

All places with a municipality, corporation, cantonment board or notified town area.

All other places which satisfied the following criteria:

- (a) minimum population of 5,000;

- (b) atleast 75 percent of the male working population engaged in non-agricultural pursuits; and
- (c) density of population of atleast 400 per sq.km (1,000 per sq.mile).

### **Urban Agglomeration**

According to 2001 census, an Urban Agglomeration is a continuous spread constituting a town and its urban outgrowths, or two or more physically contiguous towns together and any adjoining urban outgrowths of such towns. In some cases, railway colonies, university campuses, port areas, military camps, etc., would have come up around a city or statutory town outside the statutory limits but within the revenue limits of a village or villages contiguous to the town. Each such individual area by itself may not satisfy the minimum population limit to be treated as an independent urban unit but deserves to be clubbed with the town as a continuous urban spread.

In 2001 census, two modifications were added to the concept of Urban Agglomerations. (1) The core town or at least one of the constituent towns should necessarily be a statutory town and (2) The total population of all the constituent units i.e. agglomerations, towns and outgrowths of an urban agglomeration should not be less than 20,000 (as per 1991 census).

### **Source of data**

The study is based on the data collected from secondary and primary sources. A sample survey was conducted in Kochi city for collecting primary data in the first quarter of 1999. For selecting the samples for the study we have used a stratified sampling method. First we have collected detailed information about the total population, nature of houses, slum areas within a division, market centres, industrial area of all the 50 divisions of the Kochi city. A stratified sample is used and five divisions were selected. Two divisions were selected on the basis of the slum area within the divisions. One division was selected on the basis of the industrial activity. Another two divisions were selected on the basis of the nature of houses and shortage of houses. In order to get a list of all the households we have used the voters' list of the divisions. From each division 60 sample households were selected from the voters' list on the basis

of simple random method. Based on a questionnaire, information was collected from the sample households by investigators by visiting the households. The names of the divisions and the number of households covered are given below.

Name of the Division	Division Number	Number of Sample Households Covered
1. Fort Kochi	2	60
2. Mulamkuzhi	15	60
3. Thevara	25	60
4. Palarivattom	33	60
5. Aiyappankav	42	60
<b>Total</b>		<b>300</b>

### III. Urban Unemployment in Kerala

In this section we present a review of the nature and magnitude of urban unemployment in Kerala based on the surveys conducted by the Department of Economics and Statistics (DES) and National Sample Survey Organisation (NSS). The two surveys conducted by DES during 1980's give some idea about the urban unemployment prevailed in Kerala during 1980's.

#### DES Surveys on Unemployment

The DES Housing and Employment Survey of 1980 provide an estimate about the urban and rural unemployment of Kerala. In this survey the employment seekers or the unemployed are defined as those persons between the age of 15 and 60 who were not able to secure job even for a day during the previous year and are actively searching for a job. Among the surveys conducted to estimate unemployment, this survey has the merit of the largest coverage as it covered the entire households of Kerala except a few hilly pockets and the like. The survey estimated that 21.5 percent of the urban labour force are unemployed in Kerala in 1980 (Table.1). The survey results also suggests that the rate of urban unemployment was higher than the rural unemployment.

**Table.1 Distribution of the Unemployed (DES Survey 1980)**

Area	Total Unemployed (Number in thousands)	Unemployed as percentage of Labour force
Urban	214.07	21.5
Rural	1187.41	17.4
Total	1401.48	18.0

**Source:DES, 1982.**

Another survey conducted by the DES in 1987 also estimated the urban unemployment in Kerala. In this survey the term employment seekers or the unemployed include two categories of unemployed persons namely chronically unemployed and underemployed persons. Chronically unemployed or openly unemployed persons are defined as those who had not worked a single day during the reference year and are available and seeking employment. The underemployed is defined as those who worked for atleast one day during the year, but not worked for major part of the year (less than

183 days) and are available and seeking work for more days. Here, the unemployed include persons belonging to all age groups of the population.

The survey estimated the open unemployed as 27.81 lakh accounting 25.8 percent of the labour force (Table.2).

**Table.2 Number of persons unemployed and unemployment rates**

Male/ Female	Number of persons unemployed (in thousands)			Unemployed as percentage of Labour force		
	Under employed	Openly unemployed	Total unemployed	Under employed	Openly unemployed	Total unemployed
Male	947	1318	2265	12.8	17.8	30.6
Female	581	1463	2044	17.3	48.9	60.9
Total	1528	2781	4309	14.2	25.8	40.1

**Source:DES, 1988.**

Besides this another 15.28 lakh persons were estimated as underemployed persons. The major findings of the survey are the following. (1) The survey found that the rate of open unemployment prevailed in Kerala was very high. (2) The incidence of unemployment among females is higher than males. (3) The rate of open unemployment is high in urban areas compared to rural areas (Table.3)..

**Table.3 Rural and Urban Unemployment Rates (DES Survey 1987)**

Rural/Urban	Unemployed as percentage of Labour force		
	Under employed	Openly unemployed	Total unemployed
<b>Rural</b>			
Male	12.7	17.4	30.1
Female	18.7	40.9	59.6
Total	14.5	24.7	39.2
<b>Urban</b>			
Male	13.4	20.3	33.8
Female	9.3	58.6	68.0
Total	12.1	33.2	45.3

**Source: DES, 1988.**

(4) There was a high incidence of unemployment among educated persons especially S.S.L.C. holders. (5) The survey found that the incidence of unemployment is very high among the youth coming under the age group 15-29. (6) The survey estimated that 21 percent of the unemployed had a waiting period of more than 5 years and 41 percent had a waiting period ranging between 2 to 5 years. Thus the overall finding of the survey reveal a critical and grim situation about the unemployment scenario of the state.

#### **NSS Estimates on Unemployment (32<sup>nd</sup>, 38<sup>th</sup>, 43<sup>rd</sup> and 50<sup>th</sup> Rounds)**

Based on the four rounds of NSS estimates, an attempt is made to provide the trend and pattern of rural, urban and overall unemployment position of Kerala for one and a half decades. Table 4 gives three estimates of unemployment based on usual principal status, current weekly status and current daily status for the three NSS rounds. Though the three measures give three different rates of unemployment, the current day status measure is a better measure compared to others as it takes into account the fluctuations in unemployment during the week. And using the current day status measure we can point out that more than one fourth of the labour force was unemployed during the late 70's and early 80's. (Table.4). Since 1983 there has been a reduction in the rate of unemployment. A higher incidence of female unemployment is also a characteristic feature of unemployment in Kerala.

**Table 4: Unemployment Rates In Kerala (Total) (Percentage)**

Year	Usual Principal Status			Current Weekly Status			Current Daily Status		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1977-78	14.0	30.6	19.9	12.7	13.1	12.9	25.0	27.2	25.7
1983	10.8	18.4	13.1	13.5	19.9	15.4	24.0	30.8	25.9
1987-88	12.8	26.3	17.1	14.5	24.8	17.6	17.8	29.4	21.2

**Source: NSSO, 1997.**

A comparison of rural urban unemployment in Kerala between 1977-1978 and 1993-1994 based on usual principal status and current weekly status show that the rate of urban unemployment was high compared to rural unemployment (Table 5 and 6). During the 43<sup>rd</sup> and 50<sup>th</sup> NSS rounds we can find that the rate of urban unemployment was higher in Kerala compared to the rural by using all the three measures of

unemployment (Table 5 and 6). According to the 50<sup>th</sup> round survey, using the current daily status, the rate of urban male unemployment was estimated as 14.1 percent and female 27.8 percent. A characteristic of urban unemployment is the higher incidence of unemployment among females compared to males.

**Table 5: Unemployment Rates In Kerala (Urban) (percentage)**

Year	Usual Principal Status			Current Weekly Status			Current Daily Status		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1977-78	16.2	39.5	23.5	15.1	14.7	15.0	25.0	25.5	25.1
1983	11.9	25.6	15.6	13.9	23.2	16.3	22.7	29.0	24.3
1987-88	14.2	34.0	19.6	14.5	33.0	19.5	22.4	40.2	27.1
1993-94	7.6	24.4	12.0	9.3	22.0	12.9	14.1	27.8	17.7

**Source: NSSO, 1997**

**Table 6: Unemployment Rates In Kerala (Rural) (Percentage)**

Year	Usual Principal Status			Current Weekly Status			Current Daily Status		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1977-78	13.5	29.2	19.2	12.2	12.8	12.4	25.0	27.4	25.8
1983	10.6	17.0	12.6	13.4	19.3	5.2	24.3	31.1	26.2
1987-88	12.5	25.0	16.6	14.5	23.4	17.2	16.7	27.4	20.0
1993-94	7.2	15.8	9.4	7.1	12.9	8.9	13.1	19.0	14.7

**Source: NSSO, 1997**

The NSS estimate or urban unemployment indicate that the rate of unemployment in Kerala was much higher than the all India average (Table.7). The NSS 15<sup>th</sup> round survey result suggest that the rate of urban male and female unemployment was much higher in Kerala compared to all India average. According to the 15<sup>th</sup> round NSS survey, Kerala is ranked second with regard to the highest rate of urban unemployment among states in India.

**Table 7: Urban Unemployment Rate 1993-94 (Percentage)**

	Kerala			All India		
	Male	Female	Person	Male	Female	Person
Usual Principal Status	7.6	24.4	12.0	4.5	8.3	5.2
Current Weekly Status	9.3	22.0	12.9	5.2	8.4	5.8
Current Daily Status	14.1	27.8	17.7	6.7	10.5	7.4

**Source: Sarvekshana, July -September 1996.**

The NSS survey results suggest that a sizeable section of the young labour force in urban areas are unemployed. An agewise distribution of the urban unemployed persons in Kerala revealed that more than one fourth of the labour force belong to the age group 15-29. ( Table.8). On the otherhand, only a small portion of the young labour force are unemployed if we take the national average. Nearly 45 percent of the unemployed female labour force in Kerala belong to the age group 15-29. The NSS survey findings also suggest that the rate of unemployment among educated unemployed is much higher in Kerala. According to NSS 50<sup>th</sup> round, more than one fifth of the educated persons are unemployed in kerala (Table.9). More than one third of the female educated labour force is also unemployed. A comparison of the educated unemployment in Kerala with the national average suggest that the rate of educated unemployment in Kerala is much high.

**Table 8: Urban Unemployment Rate 1993-94 (Usual Principal Status)**

Age	Kerala			All India		
	Male	Female	Person	Male	Female	Person
15-19	33.5	43.7	36.8	13.4	16.8	14.1
20-24	21.2	47.7	29.7	13.9	27.7	16.5
25-29	10.1	42.1	18.4	6.7	12.9	7.8
15-29	19.0	45.2	26.8	10.8	19.4	12.4

**Source: Sarvekshana, July -September 1996**

**Table 9: Urban Unemployment Rate For The Educated, 1993-94 (15 Years and above)**

	Kerala			All India		
	Male	Female	Person	Male	Female	Person
Usual Status	12.6	40.6	21.4	6.9	20.6	8.9
Current Weekly Status	13.3	36.5	20.7	7.0	19.6	9.0

**Source: Sarvekshana, July -September 1996.**

## **IV. A Profile of Kochi City, the Study Area**

### ***History***

Kerala began its trade relations with the world about five thousand years ago. Kerala was well known for its spices and this was the factor which attracted foreigners to the state. In the beginning trade was carried out through sea. Kochi gained importance after Musiris port near Kodungalloor was closed due to a flood in 1341. It was in 1502 that Vasco da Gama arrived in Kochi. It was after the arrival of Vasco da Gama that Kochi began to extend its trade with the rest of the world significantly. After his arrival, Kochi came under the dominance of the Portuguese. Kochi was under the rule of Portuguese from 1502 to 1663. At this period there were frequent wars between the King of Kozhikode and the Samoothiris. Eventhough the Portuguese did not at first engage in the war, later they supported the king in defeating the Samoothiris.

The idea of the Portuguese behind the friendly relationship with the King of Kochi was to protect their trade interests. For the realisation of this objective, they established a Fort in Kochi with the consent of the king. It was the first European Fort in India. Later they defeated the Samoothiris and captured Kodungalloor. In 1557, the Portuguese constructed the Santa Cruz church. In 1555 the Portuguese built a palace for the King of Kochi at Mattancherry. Today this is known as the Dutch palace as the Dutch who came after the Portuguese in 1663 made some modifications in it.

In 1565 the Jews reached Kochi from Kodungalloor. The Kochi Raja agreed to protect them. In 1567 they constructed a church which is attracting tourists from many parts of the world even today. The Chinese were the next who influenced the people of Kochi after the Jews. This is evident from the Chinese nets, pots, and also Chinese silks which is seen in Kochi even today.

The supremacy of the Dutch continued till 1795 when the British East India Company captured power from them. The British established their supremacy in the economic, social and cultural fronts of Kochi. The British had contributed much in developing Kochi into a modern city. Under the direct rule of the British, Fort Kochi became a municipal town in 1866. During the British period Kochi made considerable

progress in the industrial and commercial activities. There was substantial increase in exports and imports through Kochi port under the British colonial rule. The major items of export were coffee, coconut, pepper, oil, spices etc. And the items of import were food grains, metals, textiles, oil seeds etc.

The English school which was established in Ernakulam in 1845 was accorded the status of a college in 1875. It is known as Maharajas college since 1925. The famous 'Wellington' island, a man made island, was developed during the British period. The island which can be reached by air, water and road later became an important trading centre in Kochi. The most significant contribution of the British was the construction of the modern port in Kochi in 1929.

It was in 1905 that railway line was extended to Kochi. The airport in Wellington island had helped Kochi to extend its contacts with other important cities. Ernakulam lies on the sides of the famous Vembanad lake. It was the capital of Kochi Raja till the unification of Travancore Kochi in July 1949.

The Kochi Municipal Corporation in the present form was formulated on 1<sup>st</sup> November 1967. It comprises an area of 94.88 square kilometres coming under the municipalities namely Fort Kochi, Mattancherry and Ernakulam and the panchayats such as Pallurithi, Vyttila, Vennala and Edappally. Of this, Fort Kochi belong to the region of Malabar, Edappally under Travancore and the rest of the areas belong to Kochi state.

## **Population**

Kochi city is a commercial, industrial and port city witnessing rapid changes during the last three decades. The city has an area of 95 sq.kms spread over in two taluks, Kochi and Kanayannoor. According to 1991 census, the city had 108,924 households with a population of 5.64 lakh (Table.10).

**Table 10: Area, Houses And Population In 1991 (Kochi City)**

Area in km <sup>2</sup>	94.88
Population Per km <sup>2</sup>	5,951
No. of Occupied Residential Houses	103,751
No. of Households	108,924
Population (Number of Persons)	564,589
Males (Number)	283,432
Females (Number)	281,157

**Source:- Census of India, 1991, Series-12, Kerala, Part II-A.**

As per 2001 census, Kochi is the second largest city in Kerala with a population of 5.96 lakh (Table.11). The population growth in the city during the last three decades shows a declining trend. The decadal growth of population during 1990's was only 5.6 percent (Table.12).The sex ratio of Kochi city is 1020 (1020 females per 1000 males).

**Table 11: Population Of Municipal Corporation In Kerala (2001 Census)**

Municipal Corporation	Population			Sex Ratio	Literacy Rate (Percent)		
	Male	Female	Persons		Male	Female	Persons
Thiruvananthapuram	365899	378840	744739	1035	94.88	90.16	92.47
Kochi	295351	301122	596473	1020	97.22	93.89	95.53
Kozhikode	211785	224742	436527	1061	96.82	92.29	94.47
Kollam	177586	183855	361441	1035	94.49	89.45	91.91
Thrissur	154188	163286	317474	1059	97.01	93.69	95.30

**Source:- Census of India, 2001, Series-33, Kerala Paper 2 of 2001.**

**Table 12: Growth Of Population In Kochi City**

Year	Area in km <sup>2</sup>				Decadal Growth		
	Area in km <sup>2</sup>	Persons	Male	Female	Persons	Male	Female
1901	--	61,236	33227	28009	--	--	--
1911	--	64726	35333	29393	5.70	6.34	4.94
1921	--	68493	36793	31700	5.82	4.13	7.85
1931	--	99101	52238	46863	44.69	41.98	47.83
1941	--	126456	66304	60152	27.60	26.93	28.36
1951	--	166068	86521	79547	31.32	30.49	32.24
1961	65.20	277723	143895	133828	67.23	66.31	68.24
1971	94.88	439066	224992	214074	58.09	56.36	59.96
1981	94.88	513249	258323	254926	16.90	14.81	19.08
1991	94.88	564589	283432	281157	10.00	9.72	10.29
2001	--	596473	295351	301122	5.65	4.21	7.10

**Source:- Census of India 1991, Series -12, Kerala, Census of India 2001, Series -33, Kerala, paper 2 of 2001.**

The city has a number of public and private medical institutions catering to the requirement of inpatients and outpatients. It has 84 dispensaries and 12 Health Centres run by Kochi Corporation and 78 hospitals having a bed strength of 5817 (Table.13). The high literacy rate, the awareness of the people about preventive health and the facilities available for treatment have helped to reduce the birth rate and death rate of the city considerably. Between 1968 and 1994 there had been a considerable decline in the birth rate and death rate of the population of Kochi city (Table.14)

**Table 13: Number of Medical Institutions In Kochi City In 1996**

	Public		Private		Total	
	Number	No. of beds	Number	No. of beds	Number	No. of beds
Dispensaries	6	--	78	--	84	--
M.C.H Centres	12	--	--	--	12	--
Hospitals	15	1973	63	3844	78	5817

**Source: Kochi Corporation, 1996.**

**Table 14: Trends of Birth and Death Rates From 1968 To 1994**

Year	Birth Rate	Death Rate
1968	39.57	9.30
1971	33.95	7.53
1976	28.13	6.30
1981	26.20	8.39
1986	23.26	6.38
1991	17.00	6.98
1994	17.27	6.68

**Source:- Kochi Corporation, 1996.**

The city has a fairly good number of schools such as Lower Primary Schools and Upper Primary Schools and High Schools (Table.15). The availability of the schools has helped to achieve a very high level of literacy among the population. The effective literacy rate is 97.22 for males and 93.89 for females. Effective literacy rate is calculated on total population excluding children in the age group of 0 to 6. Besides the schools, the city has nine colleges and 50 commercial educational institutions catering to the requirement of students in the city (Table.15)

**Table 15: Number Of Educational Institutions In Kochi**

Category of Institution	Government	Private	Total
(a) Lower Primary Schools	15	54	69
(b) Upper Primary Schools	6	22	28
(c) High Schools	16	32	48
(d) Other Schools			
1) Nursery School	2	33	35
2) Training School	1	3	4
(e) Colleges	2	7	9
(f) Other Commercial Institutions	1	49	50
Total	43	200	243

**Source: Kochi Corporation, 1996.**

### **Employment and Poverty**

We do not have data to show the industrial or occupational category of workers in Kochi city. But the 1991 census has published an industrial category of main workers for the Kochi urban agglomeration. Besides Kochi Corporation, the urban agglomeration includes the towns and urban outgrowths adjoining the Kochi city (Note 1). The 1991 census has estimated that of the total main workers in Kochi urban agglomeration, 1.6 percent is cultivators, 4.1 percent, agricultural labourers and 1 percent are engaged in household, industrial and service activities. The rest of them were engaged in activities such as livestock, forestry, fishing, hunting and plantations, orchards and allied activities, mining and quarrying, manufacturing, processing, servicing and repairs in other than household industry, constructions, trade and commerce, transport storage and communications and other services (Table.16). This indicates that Kochi is a highly urbanised area having employment only in non agricultural activities.

**Table. 16 Main Workers In Kochi Urban Agglomeration In****1991**

Industrial Category	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Cultivators	4679	812	5491	1.70	1.30	1.63
2. Agricultural Labourers	9388	4658	14046	3.41	7.46	4.16
3. Manufacturing, Processing, Servicing and Repairs in Household Industry	2524	1074	3598	0.92	1.72	1.07
4. Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied activities, Mining and Quarrying, Manufacturing, Processing, Servicing and Repairs in other than household Industry, Constructions, Trade and Commerce, Transport, Storage and Communications, Other Services	258665	55857	314522	93.97	89.51	93.15
Total Workers	275256	62401	337657	100.00	100.00	100.00

**Source: Census of India 1991, Series 12, Kerala, Part III – B**

According to the Development Report published by the Kochi Corporation in 1996, the total number of people below the poverty line was more than 1 lakh (Kochi Corporation, 1996). The households having an annual income less than Rs.11,850 were considered as the households below poverty line. And the total population below the poverty line was estimated as 17%.

The corporation has identified 231 slums in Kochi city. In each slum, the number of households ranged between 30 to 200. The total households in all the slums were

estimated as 12,949 with a total population of 4,348 persons (Table.17). Thus the population living in slums account for 11 percent of the total population of the city.

**Table. 17 Slums In Kochi City**

Number of Slums	231
Number of households in the slum	12949
<b>Total population in the slum</b>	64348
1. Scheduled caste	3622
2. Scheduled tribe	37
3. Others	60689
Slums having electricity	220
Slums having drinking water	218
Slums with toilet facilities	210

**Source: Kochi Corporation, 1996**

**Note 1**

Kochi urban agglomeration includes the following Municipal Corporations (C), Municipalities (M), Census Towns (CT), and Urban Outgrowths (OG) according to 1991 census.

Name	Status of town
1. Kochi	C
2. Kakkanad	OG
3. Edathala	CT
4. Kalamaserry	M
5. Thrippunithura	M
6. Alangad	CT
7. Maradu	CT
8. Choornikkara	CT
9. Kottuvally	CT
10. Eloor	M
11. Vazhakkala	CT
12. Paravoor	M
13. Kodungalloor	CT

14. Aluva	M
15. Varappuzha	CT
16. Maluvukad	CT
17. Cheranalloor	CT
18. Kadamangalam	CT
19. Thiruvamkulam	CT
20. Cheriya Kadavu	CT

Source: Census of India, 1991, Series - 12, Kerala, Part II-A.

## V. Population in the Sample Households

1. Population and Labour force: In this section we present a profile of the population of the sample survey conducted in 300 households in Kochi city. The population is classified into labour force, migrants and not in labour force. An attempt is also made to examine the socio-economic characteristics of the sample households based on the occupation of the Head of the Household. According to the sample survey, the total population in the 300 sample households was 1310 comprising 716 males and 594 females (Table.18). Of the total population, the labour force accounts for 57.2 percent, migrants 4.8 percent and persons not in labour force is 37.9 percent. The survey results suggest that nearly half of the population are young and belong to the age group of 20-29 (Table.19). The old people aged 60 and above accounted for 10 percent of the total population of the sample (Table.19). It may also be noted that 79 percent of the migrants belong to the age group ranging between 20-29.

**Table.18 Agewise Distribution of Total Population (Usual Principal Status)**

Agewise	Labour force (Employed+Unemployed)			Migrants			Not in Labour force			Total population		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 14	-	-	-	-	-	-	1 (100.0)	2 (100.0)	3 (100.0)	1 (100.0)	2 (100.0)	3 (100.0)
15-19	7 (46.67)	9 (56.25)	16 (51.61)	-	-	-	8 (53.33)	7 (43.75)	15 (48.38)	15 (100.0)	16 (100.0)	31 (100.0)
20-29	338 (85.57)	155 (60.78)	493 (75.85)	34 (8.61)	16 (6.27)	50 (7.69)	23 (5.82)	84 (32.94)	107 (16.46)	395 (100.0)	255 (100.0)	650 (100.0)
30-39	57 (89.06)	8 (21.05)	65 (63.73)	7 (10.94)	6 (15.79)	13 (12.74)	-	24 (63.16)	24 (23.53)	64 (100.0)	38 (100.0)	102 (100.0)
40-49	37 (92.50)	19 (16.67)	56 (36.36)	-	-	-	3 (7.5)	95 (83.33)	98 (63.64)	40 (100.0)	114 (100.0)	154 (100.0)
50-59	89 (79.46)	13 (10.4)	102 (43.04)	-	-	-	23 (20.54)	112 (89.6)	135 (56.96)	112 (100.0)	125 (100.0)	237 (100.0)
60+	18 (20.22)	-	18 (13.53)	-	-	-	71 (79.77)	44 (100.0)	115 (86.47)	89 (100.0)	44 (100.0)	133 (100.0)
Total	546 (76.26)	204 (34.34)	750 (57.25)	41 (5.73)	22 (3.7)	63 (4.81)	129 (18.02)	368 (61.95)	497 (37.94)	716 (100.0)	594 (100.0)	1310 (100.0)



Work participation rate denoting the percentage of employed to total population gives an indication about the economically active population. The survey results suggest that the work participation rate was 39 percent (Table.20). The survey results show considerable difference in the work participation rates of males and females. While the work participation rate of males was 62.57 percent, the corresponding rate for the females was 10.6 percent. The table also gives an agewise work participation rate for males and females.

**Table. 20 Work Participation Rate**

Agewise	Number of Employed			Number of Total Population			Work Participation Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 14	-	-	-	1	2	3	-	-	-
15 – 19	-	-	-	15	16	31	-	-	-
20 – 29	250	26	276	395	255	650	63.29	10.20	42.46
30 – 39	55	5	60	64	38	102	85.94	13.16	58.82
40 – 49	37	19	56	40	114	154	92.50	16.67	36.36
50 – 59	89	13	102	112	125	237	79.46	10.40	43.04
60 +	17	-	17	89	44	133	19.10	-	12.78
Total	448	63	511	716	594	1310	62.57	10.61	39.00

The survey results show that 68 percent of the labour force are employed (Table.21). A male-female break up show that the percentage of female workers to labour force was very low ie,30.8 percent. On the other hand male workers to total male labour force was 82 percent. The survey results also suggest that male and female workers to total labour force was lower among youth belonging to the age group 20-29.

**Table. 21 Number of Employed and Total Labour Force**

Agewise	Number of Employed			Total Labour Force			Percentage of employed to total Labour force		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 14	-	-	-	-	-	-	-	-	-
15 – 19	-	-	-	7	9	16	-	-	-
20 – 29	250	26	276	338	155	493	73.96	16.77	55.98
30 – 39	55	5	60	57	8	65	96.49	62.50	92.31
40 – 49	37	19	56	37	19	56	100.00	100.00	100.00
50 – 59	89	13	102	89	13	102	100.00	100.00	100.00

60 +	17	-	17	33	-	18	94.44	-	94.44
Total	448	63	511		204	750	82.05	30.88	68.13

The survey finding suggest that the incidence of unemployment was very high in Kochi city. The unemployment rate for male was estimated as 17.9 percent and females 69.1 percent (Table.22). In the case of youth belonging to the age group 20-29, the rate of unemployment was reported as very high and alarming.

**Table. 22 Unemployment Rate**

Age wise	Number of Employed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below 14	-	-	-	-	-	-	-	-	-
15 – 19	7	9	16	7	9	16	100.00	100.00	100.00
20 – 29	88	129	217	338	155	493	26.03	83.22	44.02
30 – 39	2	3	5	57	8	65	3.51	37.50	7.69
40 – 49	-	-	-	37	19	56	-	-	-
50 – 59	-	-	-	89	13	102	-	-	-
60 +	1	-	1	18	-	18	5.56	-	5.56
Total	98	141	239	546	204	750	17.95	69.12	31.87

The not in labour force comprises of students, old people and others. Out of the total population coming under the category of not in labour force, 10.9 percent were students, 21.9 percent old people and 67 percent were others (Table.23). Among the students, nearly 95 percent belonged to the age group 20-24. On the other hand, among the old people more than 70 percent belonged to the age 60 and above. The others include female persons engaged in domestic duties and others who are not seeking or available for work.

**Table. 23 Population Not in Labour Force**

Age wise	Population Not in Labour Force		
	Male	Female	Total
Below 14	1	2	3
15 – 19	8	7	15
20 – 29	23	84	107
30 – 39	-	24	24

40 – 49	3	95	98
50 – 59	23	112	135
60 +	71	34	115
Total	129	241	497

The survey results suggest that of the total population, 32 percent were unmarried, 61.7 percent married and 6.2 percent widowed or separated. Compared to males, a large share of the female were married. The percentage of widowed or separated are also high in the case of females (Table.24).

**Table. 24 Marital Status Of Population**

Marital Status	Total Population			Percentage		
	Male	Female	Total	Male	Female	Total
Unmarried	310	114	424	42.70	19.13	32.07
Married	404	412	816	55.65	69.13	61.72
Widowed/Separated	12	70	82	1.65	11.74	6.20
Total	726	596	1322	100.00	100.00	100.00

## 2. Socio-economic background of the Sample Households

To study the socio economic background of the sample households we have collected information about occupation, educational status and place of birth of the head of the household, nature of area of residence, asset holdings, percapita income and community wise distribution of the households. The study suggest that the structure of labour market in Kochi city is largely composed of a work force with low level of educational levels and skills and engaged in casual and self employment. A classification of the occupation of the head of the household shows that majority are casual labourers (Table.25). Nearly one fourth have regular employment in private or public sector activities. Among the head of the households or main earners, only few are females. An agewise distribution of the head of the household or main earner reveals that a high proportion of the younger persons especially in the age group 20-29 are engaged in casual employment (Table.26). On the other hand a higher proportion of the older people above the age 50 have engaged in regular employment.

**Table. 25 Occupational Distribution of Head of the Household or Main Earner**

Category	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Self employed	43	-	43	16.17	-	14.38
2. Regular employed	52	35	72	19.55	60.61	24.08
3. Casual Labour	159	8	167	59.77	24.44	55.85
4. Others	12	5	17	4.51	15.15	5.69
Total	266	33	299	100.00	100.00	100.00

**Table.26 Agewise Distribution of the Head of the Household or Main Earner**

Age	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Less than 19	-	-	-	-	-	-	-	-	-	-
20 – 29	4	9.30	17	23.61	70	41.92	-	-	91	30.43
30 – 39	6	13.95	7	9.72	26	15.57	-	-	39	13.04
40 – 49	3	6.98	13	18.05	22	13.17	1	5.88	39	13.04
50 – 59	19	44.19	34	47.22	44	26.35	10	58.82	107	35.79
60 +	11	25.58	1	1.39	5	2.99	6	35.29	23	7.69
Total	43	100.00	72	100.00	167	100.00	17	100.00	299	100.00

An examination of the educational status of the head of the households suggest that nearly half of them have a low level of educational status. Thirteen percent of the persons have an educational level upto primary (Table.27). Another 33 percent have an educational level of middle school level. The persons having a degree account 16 percent of the total head of the households or main earners. Those who have an educational level of higher secondary and graduation are mainly employed in regular jobs.

**Table. 27 Distribution of Households by the Educational Status  
of the Head of the Household / Main Earner**

Education	Self Employed		Regular Employed		Casual Labour		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Not Literate	2	4.55	-	-	2	1.20	4	1.41
Literate + Primary	6	13.64	2	2.78	26	15.56	34	12.01
Middle	22	50.00	8	11.11	66	39.52	96	33.92
Secondary	12	27.27	11	15.28	49	29.34	72	25.44
Higher Secondary	1	2.27	17	23.61	13	7.78	31	10.95
Graduate and Above	1	2.27	34	47.22	11	6.59	46	16.25
Total	44	100.00	72	100.00	167	100.00	283	100.00

The data on migration suggest that there was no substantial migration from other districts of Kerala or other states to Kochi city. The data on the place of birth of the head of the household or main earners suggest that of the total persons only 8 percent persons place of birth was other districts of Kerala (Table.28). The persons whose birth place in other state was only 3 percent. This suggest that there was no substantial migration from other districts or other regions of Kerala to Kochi. But it is likely that there was considerable migration within the district especially from rural areas to the city.



**Table. 28 Distribution of Households by Place of Birth ( Head of the Household / Main Earner)**

Place of Birth	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b><i>A. Rural</i></b>										
Ernakulam District	26	57.78	39	54.93	127	76.97	10	62.50	202	68.01
Other Districts	4	8.89	8	11.27	9	5.45	1	6.25	22	7.41
Other States	4	8.89	1	1.41	2	1.21	-	-	7	2.36
Sub Total	34	75.56	48	67.61	138	83.63	11	68.75	231	77.78
<b><i>B. Urba n</i></b>										
Ernakulam District	11	24.44	21	29.58	27	16.36	4	25.00	63	21
Other Districts	-	-	2	2.82	-	-	1	6.25	3	1.01
Other States	-	-	-	-	-	-	-	-	-	-
Sub Total	11	24.44	23	32.40	27	16.36	5	31.25	66	22.22
Total ( A + B)	45	100.00	71	100.00	165	100.00	16	100.00	297	100.00

In Kochi city, a considerable share of population live in slum areas. The survey results show that 21 percent of the population are living in slum areas (Table.29). Compared to regular and self employed, a higher proportion of casual labour households live in slum areas.

Due to low economic status, nearly 33 percent of the households have an area of house plot upto 3 cents (Table.30). Another 38 percent of the households have an area ranging between 4 to 6 cents. Only 16 percent of the households have an area of 10 cents or more. It may be noted that the regular employed have a larger area of house plot compared to other categories.

The survey findings suggest that a considerable number of households in Kochi city are poor households. A distribution of the households on the basis of monthly percapita income reveals that one fourth have an income ranging below Rs.200 to 1000 (Table.31). All the households in this income group belonged to the category of casual labour or self employed. Another 18 percent of the households having a percapita monthly income ranged between Rs.1001 and 1800. These households are belonged to the category of casual labour or self employed. Among the three employment categories, the regular employed have the highest percapita income.

The population in Kochi city can be grouped into three categories on the basis of caste viz. Forward caste, Other Backward communities and Scheduled Caste and Tribe. A castewise distribution of the households shows that other backward communities account for 76 percent of the households (Table.32). The share of the forward communities is 19 percent and scheduled caste and tribe 4 percent. Majority of the head of the household or main earner who belonged to forward caste are employed in regular jobs. In the case of backward communities only one fifth are employed in regular jobs. On the other hand, nobody from scheduled caste or tribe is employed in regular jobs.

**Table.29 Distribution of Household by Nature Area of Residence (Head of the Household/Main Earner)**

Area	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Slum	7	15.91	7	9.72	41	24.70	7	41.18	62	20.73
Residential	37	84.09	65	90.28	124	74.70	10	58.82	236	78.93
Market	-	-	-	-	1	0.60	-	-	1	0.33
Total	44	100.00	72	100.00	166	100.00	17	100.00	299	100.00 +

**Table.30 Distribution of Households by the Area of the Houseplot (Head of the Household/Main Earner)**

Area of the plot (in cents)	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0	3	6.82	3	4.17	7	4.19	1	5.88	14	4.67
1	3	6.82	4	5.56	17	10.18	1	5.88	25	8.33
2	2	4.54	2	2.78	10	5.99	4	23.53	18	6.00
3	4	9.09	7	9.72	30	17.96	1	5.88	42	14.00
4	3	6.82	7	9.72	27	16.17	1	5.88	38	12.67
5	7	15.91	13	18.06	22	13.17	1	5.88	43	14.33
6	8	18.18	8	11.11	14	8.38	3	17.65	33	11
7	1	2.27	1	1.39	2	1.20	-	-	4	1.33
8	6	13.64	5	6.94	17	10.18	-	-	28	9.33
9	-	-	1	1.39	4	2.39	1	5.88	6	2.00
10 and above	7	15.91	21	29.17	17	10.18	4	23.53	49	16.33
Total	44	100.00	72	100.00	167	100.00	17	100.00	300	100.00

**Table.31 Distribution of Households by Monthly Income of Head of the Household**

Household Monthly Per capita Income	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Below 200	3	6.82	-	-	3	1.80	17	100.00	23	7.67
201 – 400	-	-	-	-	2	1.20	-	-	2	0.67
401 – 600	1	2.27	-	-	8	4.79	-	-	9	3.00
601 – 800	1	2.27	-	-	12	7.19	-	-	13	4.33
801 – 1000	4	9.09	-	-	19	11.38	-	-	23	7.67
1001 – 1200	-	-	-	-	12	7.19	-	-	12	4.00
1201 – 1400	3	6.82	-	-	4	2.39	-	-	7	2.33
1401 – 1600	1	2.27	6	8.33	21	12.57	-	-	28	9.33
1601 – 1800	-	-	-	-	5	2.99	-	-	5	1.67
1801 – 2000	7	15.91	5	6.94	24	14.37	-	-	36	12.00
Above 2000	24	54.54	61	84.72	57	34.13	-	-	142	47.33
Total	44	100.00	72	100.00	167	100.00	17	100.00	300	100.00

**Table. 32 Distribution of Households by Caste (Head of the Household / Main Earner)**

Caste	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Forward	4	9.09	27	37.50	25	14.97	2	11.76	58	19.33
OBC	38	86.36	45	62.50	132	79.04	14	82.35	229	76.33
SC/ST	2	4.54	-	-	10	5.99	1	5.88	13	4.33
Total	44	100.00	72	100.00	167	100.00	17	100.00	300	100.00

In order to know the housing and other facilities available, we have collected information about it. There are two types of houses viz. houses with tiled roof and concrete roof. Of the total sample houses, 37 percent have concrete roofs and 62 percent have tiled roofs (Table.33). It is found that the regularly employed have better houses compared to self employed and casually employed. Among the three categories, the houses belonging to the casual employed are of lower quality compared to others.

An enquiry about the facilities available in the houses reveals that 87 percent of the houses have toilet facilities (Table.34). On the other hand, 12 percent of the houses have no toilet facility. Half of the households have water connections. The other half have no water connection and are depending on public taps or wells for water. A notable aspect is that almost all the houses have electric connections. For cooking purposes, the households are using Kerosene, firewood and gas. It is found that half of the households are using Kerosene for cooking purposes. Nearly one third uses firewood for cooking (Table.35). The houses which are using gas for cooking will account for nearly one fifth of the total houses. The survey results suggest that the regular employed households have better facilities in the house compared to self employed and casual employed. Among the three categories, the casual employed households have the lowest facilities in their houses.

**Table. 33 Nature of Houses of Sample Households**

Type of Roof	Self Employed		Regular Employed		Casual Labour		Others		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Concrete	57	79.16	14	31.81	33	19.76	7	41.17	111	37.00
Tiles	14	19.44	30	68.18	132	79.04	9	52.94	185	61.66
Others	1	1.38	-	-	2	1.97	1	5.88	4	1.33
Total	72	100.00	44	100.00	167	100.00	17	100.00	300	100.00

**Table 34 Facilities in the Houses**

Type of Facilities	Number of Houses	Total Houses	Percentage to Total
1. Houses with toilet	260	300	86.66
2. Houses with no toilet	36	300	12.00
3. With water connection	151	300	50.33
4. Without water connection	148	300	49.33
5. With electric connection	297	300	99.00

**Table. 35 Fuel used for Cooking**

Type of Fuel	Number of Households	Percentage
1. Kerosene	149	49.66
2. Gas	56	18.66
3. Firewood	95	31.66
Total	300	100.00

## **VI. Structure of Employment**

In this section, we present the characteristics and structure of employment of Kochi city based on the data collected from the sample households. Here we present the following hypothesis to explain the structure of employment (1) “In spite of the urbanisation during the last four decades the structure of labour market in Kochi city is largely composed of informal sector with casual employment”. (2) The urbanisation in Kochi had accelerated a process of casualisation of labour in secondary and tertiary sectors and failed to generate rapid growth of regular employment in modern organised sector.

We have used the NSS definitions to define employment. The workers are classified into three categories viz. regular employed, self employed and casually employed based on NSS definitions. The workers are classified using usual principal status. To classify the workers into industrial and occupational classifications, we have followed the employment classification followed by NSS viz. National Industrial Classification (NIC) and National Classification of Occupations (NCO).

### **Structure of employment based on National Industrial Classification (NIC)**

Using the two digit level, National Industrial Classification, the total workers in the sample 300 households in Kochi city is 516. A classification of workers show that 20 percent are regular employed, 11 percent self employed and 69 percent casually employed (Table.36). This indicates that the structure of labour market in Kochi city is largely dominated by casual employment. Though there has been rapid urbanisation in the city during the last four decades, there was not much change in the category of employment. The regular employed account for only one fifth of the total employment. The regular workers are those working in other’s farm or non-farm enterprises, both households and non-household and getting in return salary or wages on a regular basis. This category includes persons getting time wage, piece-wage or salary and paid apprentices both full-time and part time. The second category is the self-employed which account for 11 percent of the total workers in the sample households. A

notable aspect of self employed is that except one female all are males. The self employed is defined as persons who operate their own farm or non-farm enterprises or are engaged independently in a profession or trade on own account or a few partners or self employed in household enterprises. The essential feature of self employment is that the remuneration is determined wholly or mainly by sales or profits of the goods or services which are being produced. The self employed persons are categorized into three groups, viz. own account workers, employers, helpers in household enterprises. The third category or workers are casual employed accounting for 69 percent of the total workers in the sample households. This indicates that the urbanisation in Kochi city had accelerated a process of casualisation of labour in secondary and tertiary activities. A casual labourer is defined as a person casually engaged in other's farm or non-farm enterprises (both household and non-household) and getting in return, wage according to the terms of daily or periodic work contract.

**Table.36 Total workers in the Sample Households**

Category of workers	Number of workers			Percent		
	Male	Female	Total	Male	Female	Total
1. Regular employed	65	36	101	14.38	56.25	19.57
2. Self Employed	57	1	58	12.61	1.56	11.24
3. Casual	330	27	357	73.00	42.18	69.18
Total	452	64	516	100.00	100.00	100.00

A classification of the 44 to male and female in Kochi city show that the share of female workers was very low, 12.4 percent (Table.37). Except in the case of regular employment, the share of female workers in self employed and casual categories is very low. In the case of self employed and casual employment, more than 90 percent of the workers are males.

**Table.37 Total Workers in Sample Households:Sexwise**

Category of Workers	Percentage		
	Male	Female	Total
1. Regular	64.35	35.64	100.00
2. Self Employed	98.27	1.72	100.00
3. Casual	92.44	7.56	100.00
Total	87.60	12.40	100.00

## (a) Regular employed (Usual Principal Status)

In this approach, the status of activity of which a person spent relatively longer time of the preceding 365 days from the date of the survey is considered as principal usual status activity of a person. Based on the usual status, we attempt a detailed classification of the regular employed, self employed and casual employed. The survey results suggest that 81 percent of the regular employment is in tertiary activities like transport, storage and communications, finance and real estate, and community, social and personal services (Table.38). On the other hand, the secondary sector provides employment only to 19 percent. In order to provide a detailed industrial classification, we have given a two digit National Industrial Classification in Appendix.1. As per the appendix, the manufacturing activities comprise of manufacture of food products, beverages, tobacco and tobacco products, paper and paper products, printing, publishing and allied activities, rubber, plastic, petroleum and coal products, chemicals and chemical products and transport equipments. Water transport, land transport, services incidental to transport, storage and warehousing and communications are the important activities providing employment connected with transport and communications. The largest item in which workers are employed are community, social and personal services (Appendix.1). The activities comprises of sanitary services, education, scientific and research services, personal services, repair services and other services.

**Table.38 Industrial Classification of Regular Employed (UPS)**

National Industrial Classification	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Manufacturing	16	1	17	24.62	2.78	16.83
2. Construction	2	-	2	3.08	-	1.98
3. Wholesale and Retail Trade	5	-	5	7.69	-	4.95
4. Transport, Storage and Communications	11	1	12	16.92	2.78	11.88
5. Finance and Real Estate	22	9	31	33.85	25.00	30.69
6. Community, Social and Personal Services	9	25	34	13.85	69.44	33.66
Total	65	36	101	100.00	100.00	100.00

**UPS: Usual Principal Status**

(b) Self employed

The survey findings suggest that nearly half of the self employed are engaged in activities related to wholesale, retail trade, restaurants and hotels (Table.39). The other tertiary activities in which the self employed are engaged are transport, storage and communications, community, social and personal services. Only one tenth of the self employed are engaged in manufacturing activity. The self employed persons engaged in primary related activities account 9 percent. In order to provide a detailed industrial classification of self employed activities, we have given a two digit National Industrial Classification in Appendix.2. It may be seen in the appendix that nearly half of the self employed are engaged in wholesale trade in food, textiles, live animals, beverages, retail trade in food, food articles, beverages, tobacco and intoxicants, fuel items of household utilities and durables. It is evident that nearly 47 percent of the self employment is activities connected with retail trade. In manufacturing, the major activities are manufacture of paper and paper products, printing and publishing, metal products and parts and other manufacturing items. The major industrial activities in primary sector are livestock production and fishing.

**Table.39 Industrial Classification of Self Employed (UPS)**

National Industrial Classification	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Agriculture, Hunting, Forestry and Fishing	5	-	5	8.77	-	8.62
2. Manufacturing	6	-	6	10.53	-	10.34
3. Construction	3	-	3	5.26	-	5.17
4. Wholesale and Retail Trade and Restaurants and Hotels	28	1	29	49.12	100.00	50.00
5. Transport, Storage and Communication	7	-	7	12.28	-	12.07
6. Community, Social and Personal Services	8	-	8	14.04	-	13.79
Total	57	1	58	100.00	100.00	100.00

## (c) Casual employment

The survey finding suggest that the urbanisation of Kochi city is associated with a process of casualisation of labour. Nearly 69 percent of the total workers are engaged as casual labourers. Let us examine about the structure of casual labour market. Of the total casual labourers, 6 percent are engaged in primary related activities, 33 percent engaged in secondary activities and 60 percent are engaged in tertiary activities (Table.40). In Kochi city, more than one fifth of the casual labour are employed in construction. Nearly 11 percent are engaged in casual activities connected with manufacturing. Transport, storage and communication provided the largest share of employment (37.8%) in Kochi. Community, social and personal services provide employment for another 13 percent. In order to provide a detailed industrial classification of casual labour, we have given a two digit National Industrial Classification in Appendix.3. It may be seen from the Appendix that the major activities under manufacturing are manufacturing of textile products, wood and wood products, furniture and fixtures, paper and paper products, published and allied activities, metal products and machinery and transport equipment. Land transport, Water transport, Services incidental to transport, storage and warehousing also account 39 percent of the total casual employment. Banking, financial institutions, insurance, real estate and business services are the major sources of casual employment under Finance, Insurance

and Real Estate. Recreational, cultural and personal services are the other major activities which provide employment for the casual labourers.

**Table.40 Industrial Classification of Casual Employed (UPS)**

National Industrial Classification	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Agriculture, Hunting, Forestry and Fishing	21	-	21	6.93	-	6.36
2. Manufacturing	33	3	36	10.89	11.11	10.91
3. Electricity, Gas and Water	5	-	5	1.65	-	1.51
4. Construction	64	5	69	21.12	18.52	20.91
5. Wholesale and Retail trade and Restaurants and Hotels	16	1	17	5.28	3.7	5.15
6. Transport, Storage and Communication	119	6	125	39.27	22.22	37.88
7. Finance, Insurance, Real Estate and Business Services	12	3	15	3.96	11.11	4.54
8. Community, Social and Personal Services	33	9	42	10.89	33.33	12.73
Total	303	48	330	100.00	100.00	100.00

### **Structure of employment based on National Classification of Occupations (NCO)**

Using single and two digit level National Classification of Occupations (NCO), an attempt is made to examine the characteristics and structure of employment. The workers are classified into regular employed, self employed and casually employed. The usual principal status is used to define the three categories of employed.

#### **(a) Regular employed**

A classification of regular employed using National Classification of Occupations revealed that clerical related, production related and professional and technical related are the major categories in which regular employed are employed in Kochi city (Table.41). Nearly 36 percent of the regular employed are employed in clerical related jobs. Production related, transport equipment operators and labourers

accounted 27 percent of the total regular employed. Professional, technical and related workers account for 21 percent of the total regular workers. A notable characteristic of the regular employed is the share of female employment. Among the regular employed, 36 percent are female workers. They are mainly employed in professional, technical and related categories and clerical and related categories. In order to provide a detailed occupational classification of regularly employed we have given a two digit National Classification of Occupations in Appendix.4. It may be seen from the Appendix that the categories of professional and technical workers are accountants, auditors and related workers and teachers. Administrative, executive, managerial workers working in government, local bodies and private sector is another category in which regular workers are employed. The clerical related workers include clerks, supervisors, book-keepers, cashiers, transport and communication supervisors, transport conductors and telephone operators. More than one fourth of the regular workers are employed in production and related work. The production related workers are food and beverage processors, tailors, sewers, machinery fitters, plumbers, welders, sheet metal workers, equipment operators etc.

**Table.41 Occupational Classification of Regular Employed**

National Classification of Occupations	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Professional Technical and Related Workers	5	16	21	7.69	44.44	20.79
2. Administrative, Executive and Managerial Workers	4	-	4	6.15	-	3.96
3. Clerical and Related Workers	22	14	36	33.85	38.89	35.64
4. Sales Workers	3	2	5	4.62	5.56	4.95
5. Service Workers	5	2	7	7.69	5.56	6.93
6. Farmers, Fishermen, Hunters, Loggers and Related Workers	1	-	1	1.54	-	0.99
7. Production and Related Workers, Transport Equipment Operators and labourers	25	2	27	38.46	5.56	26.73
Total	65	36	101	100.00	100.00	100.00

In order to study the relationship between regular employment and educational level, we have classified regular employed on the basis of educational level. One can establish a strong relationship between higher educational levels and attaining regular jobs in the case of sample workers. It is found that 36 percent of the males and 73 percent of the female regular employed are having an educational level of graduation and above (Appendix.5). Only 16 percent of the males had an educational level of below S.S.L.C. The survey finding suggest that securing employment at young age is difficult in the urban labour market. Due to large excess supply of educated young labour force, getting regular job is difficult. An agewise distribution of the regular employed suggest that only a few had employment coming within the age 20-24 (Appendix.6). On the other hand majority belong to the age group above .

**(b) Self employed**

A distribution of self employed based on National Classification of Occupations reveal that more than 50 percent are sales workers (Table.42). Another 22 percent of the workers come under the category of farmers, fishermen and related workers. The production related workers is estimated as 19 percent. Thus the self employed are mostly engaged in sales related, farming or fishing related and production related activities. In order to provide a detailed occupational classification of self employed we have given a two digit NCO classification in Appendix.7. The category sales workers comprises of merchants, shopkeepers, wholesale and retail trade, manufacturers and agents. The service workers comprises of building caretakers, hair dressers, barbers and beauticians. Farm workers, fishermen and related workers is another category of self employed. Tailors, dress makers, tool makers, machine fitters, electrical workers and printing related workers are the production and related category of workers.

**Table.42 Occupational Classification of Self Employed (UPS)**

National Classification of Occupations	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Sales Workers	30	-	30	52.63	-	51.72
2. Service Workers	3	1	4	5.26	100.00	6.90
3. Farmers, Fishermen and Related Workers	13	-	13	22.81	-	22.41
4. Production and related Workers, Transport Equipment Operators and Labourers	11	-	11	19.3	-	18.97
Total	57	1	58	100.00	100.00	100.00

**(c) Casual Employment**

In the urban labour market of Kochi, casual employment account for 69 percent of the total employment. The data on casual employment suggest that a process of casualisation is taking place in the urban labour market. The survey finding suggest that of the total casual workers, 64 percent are engaged as production related, transport equipment operators and labourers (Table.43). The second category which give large employment in Kochi city are farmers, fishermen, loggers and related workers. Another 9 percent of the casual workers are in the category of sales workers. On the other hand a very few of the casual workers are engaged in professional, technical, administrative, executive and related jobs. In order to provide a detailed occupational classification of casual workers we have given a two digit National Classification of Occupations in Appendix.8. It may be seen from the Appendix that major share of the casual workers are engaged as production related, transport equipment operators and labourers. The three major items of casual workers are construction workers, material handling workers, head load workers and transport equipment operators. The other major category of production related workers are metal processors, wood workers, tailors, stone cutters, machinery fitters, electrical workers, plumbers, welders, printing workers, painters etc. The sales workers engaged in casual employment comprises of workers in wholesale and retail trade, salesmen and shop assistants, real estate, security and business services and money lenders and pawn brokers. In order to examine the relationship between casual employment and educational level, we have classified the workers on the basis of educational level. We can establish a strong relationship between lower

educational levels and casual employment. It is found that 46 percent of the males and 46 percent of the females have an educational level upto middle school (Appendix.9). Those with secondary level of education are employed as sales workers, service workers and production related workers. It is interesting to note that 27 percent of the casual workers have an educational level of graduation and above and engaged as clerical related workers, service workers and production related workers.

**Table.43 Occupational Classification of Casual Employed (UPS)**

National Classification of Occupations	Number			Percentage		
	Male	Female	Total	Male	Female	Total
1. Professional Technical and Related Workers	7	1	8	2.12	3.70	2.24
2. Administrative, Executive and Managerial Workers	2	-	2	0.61	-	0.56
3. Clerical and Related Workers	17	5	22	5.15	18.52	6.16
4. Sales Workers	27	4	31	8.18	14.81	8.68
5. Service Workers	9	3	12	2.73	11.11	3.36
6. Farmers, Fishermen, Hunters, loggers and related Workers	52	3	55	15.76	11.11	15.41
7. Production and Related Workers, Transport Equipment Operators and labourers	216	11	227	65.45	40.74	63.59
Total	330	27	357	100.00	100.00	100.00

## VII. Unemployment

In this section, we examine the characteristics and magnitude of unemployment based on the sample survey conducted in Kochi city. An attempt is also made to explain the causes for the high incidence of unemployment. To explain the causes of unemployment we are presenting the following hypotheses.

(1) “The high incidence of unemployment in Kochi city is due to low rate of growth of employment, the nature of labour market characterised by informal and casual employment and low participation of educated unemployed labour force in informal and casual activities”.

(2) “The large supply of educated young labour force leading to an excess supply of labour force on the one side, the small size and slow growth of organised sector leading to a low demand for regular employment on the other, result in high incidence of educated unemployment among youth; and

(3) “Due to severe unemployment, young and educated labour force are forced to migrate to other parts of India and abroad for employment”.

The NSS definitions used to measure unemployment are usual principal status, current week status and current day status. (1) In the usual status approach, the status of activity on which a person spent relatively longer time of the preceding 365 days from the date of survey is considered as the principal usual status activity of a person. According to this status, a person is classified as unemployed if he was not working but was either seeking or available for work for a relatively longer time during the reference period in the usual status. (2) The current weekly status approach classifies a person as unemployed if he has not worked for atleast one hour on any one day of the week but had been seeking work or had been available for work at any time during the week. (3) 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+seeking+available days). The unit of classification was thus ‘half day’ in the cds. In assigning the activity status on a day, a person was considered working for the entire day if he had worked 4 hours or more during the day. If he had worked one hour or more but less than 4 hours, he was considered working (employed) for half day and seeking/available for work

(unemployed) or not available for work (not in labour force) for the other half day depending on whether he was seeking/available for work or not. On the other hand, if a person was not engaged in any work even for one hour but was seeking or available for work for 4 hours or more, he was considered unemployed for the entire day.

The first estimate indicates the magnitude of persons unemployed for a relatively longer period during a reference period of 365 days and approximates to an indicator of chronically unemployed. The second estimate based on the weekly status gives the average weekly picture during the survey year and includes both chronic unemployment and also the intermittent unemployment of those categorised as usually employed caused by seasonal fluctuations in the labour market. The third estimate based on the daily status concept gives average level of unemployment on a day during the survey year. It is the most inclusive rate of 'unemployment' capturing the unemployed days of the chronically unemployed, the unemployed days of the usually employed who become intermittently unemployed during the reference week, and the unemployed days of those classified as employed according to the priority criterion of current weekly status.

### **Incidence of Unemployment**

Based on the sample survey, we have estimated the unemployment rate for Kochi city using the three NSS definitions. According to the usual principal status definition, the rate of unemployment in Kochi city is 32.32 percent (Table.44). The rate of unemployment is also same if we use current day status. But there is a slight difference in the rate if we use current week status. A notable characteristic of unemployment in Kochi is the high rate of unemployment among females compared to males. It is estimated that the unemployment rate for female is 69 percent. This indicates a very high incidence of female unemployment.

Table. 44 Unemployment Rate in Kochi City

Status	Number of Unemployed			Total Labour Force			Unemployment Rate (Percentage)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Usual Principal Status	103	141	244	551	204	755	18.69	69.12	32.32
2. Current week status	88	134	222	536	197	733	16.42	68.02	30.29
3. Current day status	100	142	242	548	205	753	18.25	69.27	32.14

From the above discussion, it is evident that Kochi city has a very high incidence of unemployment. The unemployment rate is much higher compared to the unemployment rate estimated by the NSS for the entire urban Kerala for the year 1993-94 (Table.7). The available estimate of unemployment for the major cities in the country also suggest that the rate of unemployment in Kochi city is very high. The NSS, using current day status had estimated that the highest rate of unemployment in the major cities of India was 16.2 percent for male and female in 1987-88 (Table.45). These evidences show that Kochi city has one of the highest rate of unemployment in the country.

**Table. 45 Unemployment Rates of Cities in India (Percentage) (N.S.S 43<sup>rd</sup> Round 1987 – 88)**

City	Usual Status		Current Week Status		Current Daily Status	
	Male	Female	Male	Female	Male	Female
Ahmedabad	7.4	2.0	8.2	2.6	11.3	4.1
Bangalore	6.0	4.7	6.9	5.3	9.5	10.4
Bombay	8.3	9.8	9.4	11.8	9.9	12.8
Calcutta	6.6	12.0	8.3	14.2	10.5	15.7
Delhi	4.1	9.1	4.2	10.8	4.4	10.8
Hyderabad	4.5	6.0	4.2	5.7	6.8	7.8
Kanpur	2.3	1.6	4.3	1.9	4.9	1.9
Madras	9.2	10.6	10.8	11.3	16.2	16.2
Nagpur	4.6	6.3	6.2	6.5	7.4	8.7
Pune	4.4	8.4	8.3	8.4	10.5	9.2
All Cities	6.4	8.5	7.5	10.2	9.4	12.2

**Source: Sarvekshana 1993, Vol. 27, No.2, October – December**

The high rate of unemployment in Kochi city may be attributed to many factors such as slow growth of employment opportunities, structure of labour market characterised by informal and casual employment, casualisation of labour, low participation of women in economic activities especially self employment and casual employment, strong preference of educated youth for regular jobs, social factors discouraging participation of unemployed labour in economic activities and the acute recession experienced in Kerala since the second half of 1990's. The structure of the labour market in the city is characterised by informal sector and casual labour, as this account for 80 percent of the total employment. Secondly, the urbanisation in Kochi had accelerated a process of casualisation of labour in secondary and tertiary sectors.

Another factor is the low participation of female unemployed labour force in economic activities especially self employment and casual employment in secondary and tertiary sectors. The social value system and social practices also discourage employment of women belonging to middle and lower middle class to engage in informal and casual activities. The strong preference of educated unemployed youth, consisting the major share of unemployed for regular jobs and their reluctance to take up informal and casual jobs have also contributed to high incidence of unemployment. The economic recession which started since the mid 1990's assumed serious proportions during the subsequent years and reached an unprecedented economic crisis by the end of 1990's had also contributed to high incidence of unemployment. The factors contributing to the recession are large scale return of Keralite emigrants from the Gulf since 1996, the lack of future prospects of emigration to the Gulf, the fall in the price of major crops like paddy, coconut and rubber since the second half of 1990's and the unprecedented fiscal crisis of the state paralysing the state sponsored developmental activities.

### **Unemployment among youth**

In order to study the category of unemployed, we have estimated the rate of unemployment for different age groups, using the three definitions viz. usual principal status, current week status and current day status. The three estimates using the three definitions are given in Table.46, 47 and Table.48. It may be seen from the table that the category of persons having highest incidence of unemployment belong to the age group 20-24. The next age group having the second highest unemployment is 25 to 29. Only few are unemployed in the age group 30 and above. This indicates that the urban unemployment in Kochi is basically the problem of youth. An agewise distribution of the unemployed show that of the total unemployed 73 percent belong to the age group 15-24 (Table.49). One of the major causes for the high incidence of unemployment among youth is the lack of regular employment opportunities. As the major share of the youth are educated, they prefer for regular employment in organised public or private sectors.

**Table. 46 Agewise Distribution of Unemployed (UPS)**

Agewise	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15 – 19	7	10	17	7	10	17	-	-	-
20 – 24	75	85	160	156	90	246	48.08	94.44	65.04
5 – 29	19	45	64	158	66	254	10.11	68.18	25.20
30 – 34	2	1	3	44	4	48	4.55	25.0	6.25
Above 34	-	-	-	156	34	190	-	-	-
Total	103	141	244	551	204	755	18.69	69.12	32.32

**Table. 47 Agewise Distribution of Unemployed (Current weekly status)**

Agewise	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15 – 19	7	8	15	7	8	15	100.00	100.00	100.00
20 – 24	64	85	149	145	90	235	44.14	94.44	63.40
25 – 29	15	40	55	184	61	245	8.15	65.57	22.45
30 – 34	2	1	3	44	4	48	4.55	25.0	6.25
Above 34	-	-	-	156	34	190	-	-	-
Total	88	134	222	536	197	733	16.42	68.02	30.29

**Table. 48 Agewise Distribution of Unemployed (Current day status)**

Agewise	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15 – 19	7	10	17	7	10	17	100.00	100.00	100.00
20 – 24	74	87	161	155	92	247	47.74	94.57	65.18
25 – 29	17	44	61	186	65	251	9.14	67.69	24.30
30 – 34	2	1	3	44	4	48	4.55	25.0	6.25
Above 34	-	-	-	156	34	190	-	-	-
Total	100	142	242	548	205	753	18.25	69.27	32.14

**Table. 49 Agewise Distribution of Unemployed Persons (UPS)**

Age group	Number of Males	Number of Females	Total	Percentage		
				Male	Female	Total
15 – 19	7	10	17	6.8	7.09	6.97
20 – 24	75	85	160	72.82	60.28	65.57
25 – 29	19	45	64	18.45	31.91	26.23
30 – 34	2	1	3	1.94	0.71	1.23
Total	103	141	244	100.00	100.00	100.00

### Unemployment Among Educated

The survey has estimated the rate of unemployment among different categories of educated unemployed. It is found that the unemployment rate is the highest among persons having an educational status of higher secondary. Using usual principal status definition, it is estimated that the unemployment rate among persons having higher secondary education is 44 percent (Table.50). The next category of persons having highest incidence of unemployment is persons having Secondary School Leaving Certificates (S.S.L.C). More than one fourth of the persons having an educational level of graduation and above is reported as unemployed. The survey results also suggest that the incidence of unemployment among educated females having secondary and higher secondary education is very high compared to the males. The estimate on unemployment rate using current week status and current day status is given in Table.51 and 52.

**Table. 50 Education Level of Unemployed (UPS)**

Educational Level	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Upto Primary	-	-	-	65	1	66	-	-	-
Middle	36	50	86	201	56	257	17.91	89.29	33.46
Secondary	34	49	83	153	58	211	22.22	84.48	39.34
Higher Secondary	19	25	44	66	34	100	28.79	73.53	44.00
Graduate & Above	14	17	31	66	55	121	21.21	30.91	25.62
Total	103	141	244	551	204	755	18.69	69.12	32.32

**Table. 51 Education Level of Unemployed (Current Weekly Status)**

Educational Level	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Upto Primary	-	-	-	65	1	66	-	-	-
Middle	31	48	79	196	54	250	15.82	88.88	31.60
Secondary	28	46	74	147	55	202	19.05	83.64	36.63
Higher Secondary	17	25	42	64	34	98	26.56	73.53	42.86
Graduate & Above	12	15	27	64	53	117	18.75	28.30	23.08
Total	88	134	222	536	197	733	16.42	68.02	30.29

**Table. 52 Educational Level of Unemployed (Current Day Status)**

Educational Level	Number of Unemployed			Total Labour Force			Unemployment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Upto Primary	-	-	-	65	1	66	-	-	-
Middle	36	50	86	201	56	257	17.91	89.29	33.46
Secondary	31	48	79	150	57	207	20.67	84.21	38.16
Higher Secondary	19	26	45	66	35	101	28.78	74.29	44.55
Graduate & Above	14	18	32	66	56	122	21.21	32.14	26.23
Total	100	142	242	548	205	753	18.25	69.27	32.14

We have also estimated the share of educated and non-educated unemployed persons in the city. It is found that of the total unemployed 35 percent are non-educated (Table.53). The educated account for 65 percent consisting 34 percent secondary, 18 percent higher secondary, 13 percent graduates and above. This indicates that the major share of unemployed in Kochi are educated category. Thus the unemployment in Kochi city is basically a problem of educated youth.

**Table. 53 Educational Status of Unemployed Persons (UPS)**

Educational Status	Number of Males	Number of Females	Total	Percentage		
				Male	Female	Total
Middle	36	50	86	34.95	35.46	35.25
Secondary	34	49	83	33.01	34.75	34.02
Higher Secondary	19	25	44	18.45	17.73	18.03
Graduate & Above	14	17	31	13.59	12.06	12.70
Total	103	141	244	100.00	100.00	100.00

To know about the educational and skill level of the educated unemployed, we have collected information about the vocational courses attended by them. It was found that 39 percent of the unemployed having secondary education had undergone vocational training (Table.54). In the case of unemployed having higher secondary education, 64 percent had attended vocational courses. Nearly half of the unemployed graduates have also vocational education. Thus inspite of the vocational education, the educated unemployed are not getting gainful employment.

**Table. 54 Unemployed Persons having Vocational Education (UPS)**

Educational Category	Total Number of Unemployed			Number having Vocational Education			Percentage of persons having Vocational Education		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Middle	36	50	86	4	10	14	11.11	20.00	16.28
Secondary	34	49	83	9	23	32	26.47	46.94	38.55
Higher Secondary	19	25	44	11	17	28	57.89	68.00	63.64
Graduate & Above	14	17	31	7	8	15	50.00	47.06	48.39
Total	103	141	244	31	58	89	30.10	41.13	36.48

The high incidence of unemployment among educated youth may be attributed to the following factors. (1) There is large supply of educated young labour force compared to the job vacancies available and resulting in excess supply of labour. (2) The educated unemployed have a strong preference for regular jobs in public and private sectors which are scarce. (3) Due to the slow growth and small size of the organised sector, not much employment opportunities are generated in the urban labour market. It may be noted that of the total employment, the regular employment account for only 20 percent. (4) The educated unemployed are not interested to work in low paid, low status casual jobs which account for about 70 percent of the total employment in the labour market. (5) Due to the social value system and social practices, the educated unemployed females are not interested to work as self employed and casual labour. Thus the large supply of educated young labour force leading to excess supply of labour on the one side, the small size and slow growth of organised sector leading to a low demand for regular employment on the other result in high incidence of educated unemployment.

### **Unemployment Among Lower Income Households**

The hypothesis explaining the relationship between low income and high incidence of unemployment is widely accepted in the case of developing economies. Based on the survey data, an attempt is made to test the hypothesis in the context of urban labour market in Kochi. The survey findings suggest that a higher proportion of the unemployed belong to the households with low monthly per capita income. It is found that 23 percent of the unemployed belong to the households having a monthly per capita income below Rs.400/- (Table.55). Another 15 percent of the

unemployed belong to the household having a monthly per capita income ranging between Rs.401 and 600. From the table it is evident that majority (58.37%) of the unemployed persons belong to the households having a monthly per capita income upto Rs.800. On the other hand only 9 percent of the unemployed belong to the households having a monthly per capita income more than Rs.1400/-. Thus the hypothesis explaining the relationship between low income and high incidence of unemployment is valid in the case of urban labour market of Kochi.

**Table. 55 Household Monthly Percapita Income of the Unemployed (UPS)**

Household Monthly Percapita Income	Number of Unemployed			Percentage		
	Male	Female	Total	Male	Female	Total
Below 400	29	28	57	28.16	19.86	23.36
401 – 600	15	22	37	14.56	15.60	15.16
601 – 800	16	32	48	15.53	22.70	19.67
801 – 1000	10	19	29	9.71	13.48	11.89
1001 – 1400	7	21	28	6.80	14.89	11.48
1401 – 1800	5	6	11	4.85	4.26	4.51
1801 and Above	8	4	12	7.77	2.84	4.92
Not Available	13	9	22	12.62	6.38	9.02
Total	103	141	244	100.00	100.00	100.00

## **Unemployment and Occupational Background of the Households**

A major factor which determine the category of employment and unemployment of the members of the household is the occupational background of the household. We can also establish a relationship between the type of employment of the head of the household and the incidence of unemployment. It is hypothesised that the incidence of unemployment will be higher in households where the occupation of the head of the household is casual employment. The survey results suggests that a high proportion of unemployed belong to the households where the occupation of the head of the household is casual employment. More than 55 percent of the unemployed belong to the households where the occupation of the head of the household is casual employment

(Table.56). On the other hand a low proportion of the unemployed belong to regular and self employed households. It is also likely that the casual employed households are poorer households compared to other categories of households. Thus we can establish a strong relationship between incidence of unemployment and the type of employment of the head of the household in the urban labour market of Kochi.

**Table. 56 Occupation of the Head of the Household of the Unemployed**

Occupation of Head of the Household / Main Earner	Number of Unemployed			Percentage		
	Male	Female	Total	Male	Female	Total
Casual Employment	52	83	135	50.49	58.87	55.33
Regular Employment	27	29	56	26.21	20.57	22.95
Self Employment	15	21	36	14.56	14.89	14.75
Others	9	8	17	8.74	5.67	6.97
Total	103	141	244	100.00	100.00	100.00

## Social Background of Unemployed

Studies on unemployment have established a relationship between the incidence of unemployment and the social background of the unemployed persons. In this section, we attempt to examine this relationship by collecting the information about the castewise distribution of unemployed. The survey result show that more than three fourth of the unemployed persons belong to other backward communities (Table.57). This indicates that the social background has a role in the determination of employment and unemployment. It is likely that a good number of the households of the other backward communities are poor households.

**Table. 57 Caste of the Unemployed Persons (UPS)**

Caste	Number of Unemployed			Percentage		
	Male	Female	Total	Male	Female	Total
Forward	19	31	50	18.45	21.99	20.49
Other Backward Community (OBC)	78	107	185	75.73	75.89	75.82
Scheduled Caste / Tribe	5	3	8	4.85	2.13	3.28
Not Available	1	-	1	0.97	-	0.41
Total	103	141	244	100.00	100.00	100.00

The nature of the area of residence is another indicator which gives the social background of the unemployed. In the sample we found that more than one fifth of the unemployed live in slums (Table.58). It is likely that most of them live in slums belonging to the lowest social and economic strata. These evidences suggest that there exist a relationship between social background and the incidence of unemployment.

**Table. 58 Area of Residence of the Unemployed (UPS)**

Type of Area	Number of Unemployed			Percentage		
	Male	Female	Total	Male	Female	Total
Slum	23	29	52	22.23	20.57	21.31
Residential	79	111	190	76.70	78.72	77.87
Others	1	1	2	0.97	0.71	0.82
Total	103	141	244	100.00	100.00	100.00

## Unemployment and migration

Of central importance in the labour marketing process is the mobility of labour, ie, shifting of human resources into and out of labour force and among occupations, industries, geographic localities and labour sub markets. These kinds of movements of workers embrace all the processes whereby labour supply adjusts to changes in the level and composition of the demand for labour. In an urban labour market characterised by excess supply of labour, the natural process by which the supply adjusts to the demand is through migration. It is hypothesised that the excess supply of educated young labour force in the urban labour market is being adjusted through a process of migration. In other words due to severe unemployment among educated young labour force, they were forced to migrate to other parts of India and abroad for employment.

The study reveals that most of the migrants who migrated from Kochi are young men. It is found that 81 percent of the migrants belong to the age group 20-29 (Table.59). Information collected about the educational status of the migrants reveals that of the total migrants, 91 percent are educated category (Table.60). Three categories of educated in our sample are persons with a pass of S.S.L.C, higher secondary, graduates and other higher qualifications.

Table. 59 Number of Migrants in Sample Households

Age	Number of Emigrants (Outside India) (Male)	Number of Out Migrants (Within India) (Male)	Total	Percentage		
				Emigrants	Out Migrants	Total
20 – 24	6	3	9	20.00	25.00	21.43
25 – 29	19	6	25	63.33	50.00	59.52
30 – 34	1	2	3	3.33	16.67	7.14
35 – 39	3	1	4	10.00	8.33	9.52
40 – 44	1	-	1	3.33	-	2.38
Total	30	12	42	100.00	100.00	100.00

Table. 60 Educational Level of Migrants

Educational Status	Number of Emigrants (Outside India) (Male)	Number of Out Migrants (Within India) (Male)	Total	Percentage		
				Emigrants	Out Migrants	Total

Middle	4	-	4	13.33	-	9.52
Secondary	16	4	20	53.33	33.33	47.62
Higher Secondary	7	6	13	23.33	50.00	30.95
Graduate & Above	3	2	5	10.00	16.67	11.90
Total	30	12	42	100.00	100.00	100.00

In order to know the causes of migration, we have collected information about the reasons of migration. The reason of emigration of all the emigrants in our sample is employment. In the case of outmigrants, except one, the cause of migration of all of them is employment. Thus the survey results suggests that the cause of migration of almost all emigrants and outmigrants is employment.

In order to study the trends in migration, we have collected information about the yearwise migration. The data show that the migration during the second half of 1980's and the first half of 1990's was lower. On the other hand there has been a substantial increase in migration since 1996. It is found that of the total migrants 63 percent migrated from Kochi between 1996 and 1998 (Table.61).

**Table. 61 Yearwise Migration of Migrants**

Year wise Distribution	Number of Emigrants (Outside India) (Male)	Number of Out Migrants (Within India) (Male)	Total	Percentage		
				Emigrants	Out Migrants	Total
1984	1	-	1	3.33	-	2.44
1987	1	-	1	3.33	-	2.44
1989	2	-	2	6.67	-	4.88
1990	-	1	1	-	9.09	2.44
1991	-	1	1	-	9.09	2.44
1992	2	-	2	6.67	-	4.88
1994	1	3	4	3.33	27.27	9.76
1995	3	-	3	10.00	-	7.32
1996	11	3	14	36.67	27.27	34.15
1997	6	3	9	20.00	27.27	21.95
1998	3	-	3	10.00	-	7.32
Total	30	11	41	100.00	100.00	100.00

The migration from Kochi is of two types, viz. emigration and out migration. Of the total emigrants, 71 percent emigrated mainly to the Gulf countries viz. U.A.E. (Dubai), Qatar, Kuwait and Saudi Arabia. Among the Gulf countries, two major destinations and Saudi Arabia and U.A.E. (Table.62). The out migration from Kochi is mainly to other parts of India. Except two persons, all the out migrants migrated to Bangalore, Mumbai and other places in Tamil Nadu (Table.63).

**Table. 62 Destination Of Emigration**

Name of Country / Place	Number of Persons (Male)	Percentage
Dubai (UAE)	7	23.33
Hong Kong	1	3.33
Qatar	2	6.67
Kuwait	1	3.33
Saudi Arabia	19	63.33
Total	30	100.00

Table. 63 Destination Of Out Migration

Name of Country / Place	Number of Persons (Male)	Percentage
Kasargod	1	8.33
Kottayam	1	8.33
Bangalore	2	16.67
Mumbai	4	33.33
Tamil Nadu	3	25.00
Not Available	1	8.33
Total	12	100.00

Based on the evidences presented above, we can conclude that due to severe unemployment, young and educated labour force are forced to migrate to other parts of India and abroad from Kochi for employment.

## **VIII. Summary and Conclusions**

The objectives of the study are the following.

1. to study the nature, characteristics and structure of urban employment.
2. to examine the incidence, type and characteristics of urban unemployment  
and
3. to present explanations for the high incidence of urban unemployment

In the study we have followed the NSS's conceptual frame work to define employed, unemployed, labour force and out of labour force. Accordingly, 'Workers' comprises of persons who are engaged in any economic activity and who despite their attachment to economic activity have abstained from work due to illness, injury, physical disability or other contingencies necessitating temporary absence from work. The category of 'Unemployed' includes persons who are willing to work but not worked and had sought employment through employment exchanges, friends or relatives. The 'Labour force' constitutes persons who are either 'working' or seeking or available for work during a reference period. The 'out of labour force' includes persons who were neither seeking, nor available for work during the reference period. To define employment and unemployment, three definitions viz. usual status, current week status and current daily status are used.

According to usual principal status, a person is considered 'employed' if the person was engaged for a relatively longer time during the past year in any one or more work related activities in the usual principal status. Similarly, a person is considered 'unemployed' if he was not working but was neither seeking nor available for work for a relatively longer time during the past year in the principal usual status.

The 'current weekly status' measure classifies a person as employed if the person was engaged for atleast one hour on any one day of the previous week or any work related activity. As regards unemployed, a person who had not worked even for one hour on any one day of the week, but had been seeking or had been available for work for

atleast one hour during the week days was considered unemployed or seeking / available for work.

The current daily 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)

Primary and secondary data were used for the study. Primary data was collected from Kochi city through a sample survey conducted during the first quarter of 1999. We have used a stratified sampling method for the collection of data. Of the total 50 divisions in Kochi city, a stratified sample was used and five divisions were selected. Two divisions were selected on the basis of slum area, one division on the basis of industrial activity and another two divisions were selected on the basis of nature and shortage of housing. From each division, 60 sample households were selected on the basis of simple random method. Based on a questionnaire, the investigators visited the houses and collected information through interviews. In order to explain the characteristics, nature and structure of employment and unemployment, we have presented the following hypotheses.

- (1) In spite of the urbanisation during the last four decades, the structure of labour market in Kochi city is largely composed of informal sector with casual employment.
- (2) The urbanisation process in Kochi had accelerated a process of casualisation of labour in secondary and tertiary sectors and failed to generate rapid growth of regular employment in modern organised sector.
- (3) The high incidence of unemployment in Kochi city is due to the low rate of growth of employment, the nature of labour market characterised by informal and casual employment and low participation of educated unemployed labour force in informal and casual activities.
- (4) The large supply of educated young labour force leading to an excess supply of labour force on the one side, the small size and slow growth of organised sector leading to a low demand for regular employment on the other have resulted in high incidence of educated unemployment among youth, and

(5) Due to severe unemployment, young and educated labour force are forced to migrate to other parts of India and abroad for employment.

The major findings of the study relating to nature, characteristics and structure of urban employment in Kochi city are the following. It is found that the total workers in 300 sample households in Kochi city was 516. Of the total workers, 20 percent are regular employed, 11 percent self employed and 69 percent casually employed. This indicates that the structure of labour market in Kochi city is largely dominated by casual employment. It also shows that the urbanisation in Kochi had accelerated a process of casualisation of labour in secondary and tertiary activities. Thus the survey findings support the hypothesis we put forward to explain the nature and structure of employment.

A classification of employment based on industrial classification is made in the case of regular employed, self employed and casually employed. It is found that 81 percent of the regular employment were in tertiary activities like transport, storage and communication, whereas secondary sector accounted for 19 percent. Of the total self employed nearly half are engaged in activities related to wholesale and retail trade, restaurants and hotels. Only one tenth were engaged in manufacturing activities. As regards casual employment, 6 percent are engaged in primary related activities, 33 percent in secondary activities and 60 percent in tertiary activities. More than one fifth of the casual labourers are engaged in construction activities.

The survey has also classified the three categories of workers using National Classification of Occupations. A classification of regular employed showed that 36 percent are engaged in clerical related jobs, 27 percent production and related activities and 21 percent in professional, technical and related activities. A notable characteristic is that of the total regular employed, 36 percent are female workers. Majority of the regular employed belonged to the category of educated and the age group of above 40.

An occupational classification revealed that of the total self employed, more than 50 percent are sales workers. Another 22 percent come under the category of

farmers, fishermen and other related workers. Among the self employed, the production related workers account for about one fifth.

Majority of the casually employed are engaged in production related and transport related activities. Their share is estimated as 64 percent. The second place is occupied by farmers, fishermen, loggers etc. About 9 percent of the casual workers were employed as sales workers. Nearly half of the casual workers, both male and female had an educational level upto middle school.

Let us also present the major findings relating to nature and the characteristics of urban unemployment in Kochi. Based on usual principal status definition, the survey estimated the unemployment rate of Kochi city as 32.32 percent. A characteristic of unemployment in Kochi is the high rate of unemployment among females, i.e., 69 percent. On the other hand the unemployment rate for males was 18.69 percent. The survey found that the incidence of unemployment among young people belonging to the age group 20-24 was very high. Of the total unemployed 73 percent belonged to the age group 15-24.

The survey result revealed that the incidence of unemployment among educated labour force was very high. It was found that unemployment rate is highest among persons having an educational status of higher secondary. More than one fourth of the persons having an educational level of graduation and above were reported as unemployed. The incidence of unemployment among educated females with secondary and higher secondary education was found very high. The excess supply of educated labour force on the one side, the small size and slow growth of organised sector leading to a low demand for regular employment on the other have resulted in high incidence of educated unemployed youth.

The survey results showed a relationship between high incidence of unemployment and low per capita income of households, low occupational category of the head of the households, the social background denoting to the community to which they belong and the poor environment in which they live. According to the survey, a higher proportion of the unemployed belong to the households with low monthly per capita income. It is also found that a high proportion of unemployed belong to the

households where the occupation of the head of the household is casual employment. It is reported that more than one fifth of the unemployed live in slums.

The survey findings indicate that due to severe unemployment, young and educated labour force are forced to migrate to other parts of India and abroad for employment. It is found that 81 percent of the migrants from Kochi belong to the age group 20-29 and 91 percent are educated. It is reported that the major reasons for migration was employment. Of the total migrants in our sample, 71 percent emigrated to the Gulf countries.

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## APPENDIX 1

### Industrial Classification of Regular Employed (UPS)

National Industrial Classification	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Manufacturing	<b>16</b>	<b>1</b>	<b>17</b>	<b>24.62</b>	<b>2.78</b>	<b>16.83</b>
Manufacture of Food Products	5	-	5	7.69	-	4.95
Manufacture of Beverages, Tobacco and Tobacco Products	1	-	1	1.54	-	0.99
Manufacture of Paper and Paper Products and Printing, Published and Allied Industries	2	-	2	3.08	-	1.98
<b>Manufacture of Rubber, Plastic, Petroleum and Coal Products</b>	3	1	4	4.62	2.78	3.96
Manufacture of Chemical and Chemical Products (except products of Petroleum and Coal)	2	-	2	3.08	-	1.98
Manufacture of Transport Equipment and parts	3	-	3	4.62	-	2.97

Construction	<b>2</b>	-	<b>2</b>	<b>3.08</b>	-	<b>1.98</b>
<b>Construction</b>	1	-	1	1.54	-	0.99
<b>Activities Allied to Construction</b>	1	-	1	1.54	-	0.99
Wholesale and Retail Trade	<b>5</b>	-	<b>5</b>	<b>7.69</b>	-	<b>4.95</b>
<b>Retail Trade in Food and Food Articles, Beverages, Tobacco and Intoxicants</b>	2	-	2	3.08	-	1.98
<b>Retail Trade in Textiles</b>	2	-	2	3.08	-	1.98
<b>Restaurants and Hotels</b>	1	-	1	1.54	-	0.99
Transport, Storage and Communication	<b>11</b>	<b>1</b>	<b>12</b>	<b>16.92</b>	<b>2.78</b>	<b>11.88</b>
<b>Land Transport</b>	1	-	1	1.54	-	0.99
<b>Water Transport</b>	2	-	2	3.08	-	1.98
<b>Services incidental to Transport</b>	2	-	2	3.08	-	1.98
<b>Storage and Warehousing</b>	4	-	4	6.15	-	3.96
<b>Communication</b>	2	1	3	3.08	2.78	2.97
Finance and Real Estate	<b>22</b>	<b>9</b>	<b>31</b>	<b>33.85</b>	<b>25.00</b>	<b>30.69</b>
<b>Banking and Similar Type of Financial Institutions</b>	7	9	16	10.77	25.00	15.84
<b>Legal Service</b>	15	-	15	23.08	-	14.85
Community, Social and Personal Services	<b>9</b>	<b>25</b>	<b>34</b>	<b>13.85</b>	<b>69.44</b>	<b>33.66</b>
<b>Sanitary Services</b>	1	-	1	1.54	-	0.99
<b>Education, Scientific and Research Service</b>	2	12	14	3.08	33.33	13.86
<b>Personal Services</b>	4	13	17	6.15	36.11	16.83
<b>Repair Services</b>	1	-	1	1.54	-	0.99
<b>Services not elsewhere classified</b>	1	-	1	1.54	-	0.99
Total	<b>65</b>	<b>36</b>	<b>101</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## APPENDIX 2

### Industrial Classification of Self Employed (UPS)

National Industrial Classifications	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Agriculture, Hunting, Forestry and Fishing	<b>5</b>	-	<b>5</b>	<b>8.77</b>	-	<b>8.62</b>
Plantation	1	-	1	1.75	-	3.45
Livestock Production	2	-	2	3.51	-	3.45
Fishing	2	-	2	3.51	-	3.45
Manufacturing	<b>6</b>	-	<b>6</b>	<b>10.53</b>	-	<b>10.34</b>
Manufacture of Paper and Paper Products and Printing, Published and Allied Industries	2	-	2	3.51	-	3.45
Manufacture of Metal products and Parts, except Machinery and Transport Equipment	1	-	1	1.75	-	1.72
Other Manufacturing Industries	3	-	3	5.26	-	5.17
Construction	<b>3</b>	-	<b>3</b>	<b>5.26</b>	-	<b>5.17</b>
Construction	3	-	3	5.26	-	5.17
Wholesale and Retail Trade and Restaurants and Hotel	<b>28</b>	<b>1</b>	<b>29</b>	<b>49.12</b>	<b>100.0</b>	<b>50.0</b>
Wholesale Trade in food, Textiles, Live Animals, Beverages and Intoxicants	2	-	2	3.51	-	3.45
Retail Trade in Food and Food Articles, Beverages, Tobacco and Intoxicants	14	-	14	24.56	-	24.14
Retail Trade in Fuel and other Household Utilities and Durables	1	-	1	1.75	-	1.92
Retail Trade in Others	11	1	12	19.30	100.0	20.69
Transport Storage and Communication	<b>7</b>	-	<b>7</b>	<b>12.28</b>	-	<b>12.07</b>
Service Incidental to Transport	7	-	7	12.28	-	12.07
Community, Social and Personal Services	<b>8</b>	-	<b>8</b>	<b>14.04</b>	-	<b>13.79</b>
Personal Services	4	-	4	7.02	-	6.90
Repair Services	3	-	3	5.26	-	5.17
Services not elsewhere classified	1	-	1	1.75	-	1.72
<b>Total</b>	<b>57</b>	<b>1</b>	<b>58</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**APPENDIX 3****Industrial Classification of Casual Employed (UPS)**

National Industrial Classification	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Agriculture, Hunting, Forestry and Fishing	<b>21</b>	-	<b>21</b>	<b>6.93</b>	-	<b>6.36</b>
Fishing	21	-	-	6.93	-	-
Manufacturing	<b>33</b>	<b>3</b>	<b>36</b>	<b>10.89</b>	<b>11.11</b>	<b>10.91</b>
Manufacture of Food Products	1	-	1	0.33	-	0.30
<b>Manufacture of Textile Products (including wearing apparel other than foot wear)</b>	2	3	5	0.66	11.11	1.52
Manufacture of Wood and Wood Products, Furniture and Fixtures	17	-	17	5.61	-	5.15
Manufacture of Paper and Paper Products and Printing, Published and Allied Industries	5	-	5	1.65	-	1.52

<b>Manufacture of Metal Products and Parts, except Machinery and Transport Equipment</b>	3	-	3	0.99	-	0.91
<b>Other Manufacturing Industries</b>	5	-	5	1.65	-	1.52
Electricity, Gas and Water	<b>5</b>	-	<b>5</b>	<b>1.65</b>	-	<b>1.52</b>
<b>Electricity</b>	4	-	4	1.32	-	1.21
<b>Water Works and Supply</b>	1	-	1	0.33	-	0.30
Construction	<b>64</b>	<b>5</b>	<b>69</b>	<b>21.12</b>	<b>18.52</b>	<b>20.91</b>
<b>Construction</b>	6	-	6	1.98	-	1.82
<b>Activities Allied to Construction</b>	58	5	63	19.14	18.52	19.09
Wholesale and Retail Trade and Restaurants and Hotels	<b>16</b>	<b>1</b>	<b>17</b>	<b>5.28</b>	<b>3.70</b>	<b>5.15</b>
<b>Wholesale &amp; Retail Trade and Restaurants and Hotels</b>	1	-	1	0.33	-	0.30
<b>Wholesale Trade in Food, Textiles, live Animals, Beverages and Intoxicants</b>	2	-	2	0.66	-	0.61
<b>Retail Trade in food and Food Articles, Beverages, Tobacco and Intoxicants</b>	3	1	4	0.99	3.70	1.21
<b>Retail Trade in Others</b>	4	-	4	1.32	-	1.21
<b>Restaurants and Hotels</b>	6	-	6	1.98	-	1.82
Transport, Storage and Communication	<b>119</b>	<b>6</b>	<b>125</b>	<b>39.27</b>	<b>22.22</b>	<b>37.88</b>
<b>Land Transport</b>	30	-	30	9.90	-	9.09
<b>Water Transport</b>	3	-	3	0.99	-	0.91
<b>Service Incidental to Transport</b>	62	4	66	20.46	14.81	20.00
<b>Storage and Warehousing</b>	23	2	25	7.58	7.41	7.58
<b>Communications</b>	1	-	1	0.33	-	0.30
Finance, Insurance, Real Estate and Business Service	<b>12</b>	<b>3</b>	<b>15</b>	<b>3.96</b>	<b>11.11</b>	<b>4.54</b>
<b>Banking and Similar type of Financial Institutions</b>	3	3	6	0.99	11.11	1.82
<b>Providents and Insurance</b>	2	-	2	0.66	-	0.61
<b>Real Estate and Business Service</b>	6	-	6	1.98	-	1.82
<b>Legal Service</b>	1	-	1	0.33	-	0.30
Community, Social and Personal Services	<b>33</b>	<b>9</b>	<b>42</b>	<b>10.89</b>	<b>33.33</b>	<b>12.73</b>
<b>Public Administration &amp; Defence Services</b>	1	-	1	0.33	-	0.30
<b>Medical and Health Services</b>	4	-	4	1.32	-	1.21
<b>Recreational and Cultural Services</b>	8	8	16	2.64	29.63	4.85
<b>Personal Services</b>	20	1	21	6.60	3.70	6.36
Total	<b>303</b>	<b>27</b>	<b>330</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## APPENDIX 4

### Occupational Classification of Regular Employed (UPS)

National Classification of Occupations	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Professional, Technical and Related Workers	<b>5</b>	<b>16</b>	<b>21</b>	<b>7.69</b>	<b>44.44</b>	<b>20.71</b>
Accountants, Auditors and Related Workers	3.00	4	7	4.62	11.11	6.93
Teachers	2.00	12	14	3.08	33.33	13.86
<b>Administrative Executive and Managerial Workers</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>6.15</b>	<b>-</b>	<b>3.96</b>
<b>Administrative Executive and Managerial Workers</b>	1.00	-	1	1.54	-	0.99
Administrative and Executive Officials Government and Local Bodies	1.00	-	1	1.54	-	0.99
Water Proprietors, Directors and Managers, Mining, Construction, Manufacturing	1.00	-	1	1.54	-	0.99
<b>Administrative, Executive and Managerial Workers n.e.c</b>	1.00	-	1	1.54	-	0.99
Clerical and Related Workers	<b>22</b>	<b>14</b>	<b>36</b>	<b>33.85</b>	<b>38.89</b>	<b>35.64</b>
<b>Clerical and Other Supervisors</b>	3.00	8	11	4.62	22.22	10.89
<b>Book-Keepers, Cashiers, and Related Workers</b>	8.00	3	11	12.31	8.33	10.89
<b>Clerical and Related Workers n.e.c</b>	3.00	-	3	4.62	-	2.97
<b>Transport and Communication Supervisors</b>	2.00	1	3	3.08	2.78	2.97
Transport Conductors and Guards	2.00	1	3	3.08	2.78	2.97
<b>Telephone and Telegraph Operators</b>	4.00	1	5	6.15	2.78	4.95
<b>Sales Workers</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>4.62</b>	<b>5.56</b>	<b>4.95</b>
Sales Workers	2.00	2	4	3.08	5.56	3.96
Merchants and Shopkeepers, Wholesale and Retail Trade	1.00	-	1	1.54	-	0.99
<b>Service Workers</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>7.69</b>	<b>5.56</b>	<b>6.93</b>
Hotel and Restaurant Keepers	1.00	-	1	1.54	-	0.99
Cooks, Waiters, Bartenders and Related Workers(Domestic and Institutional)	1.00	2	3	1.54	5.56	2.97
Building Caretakers, Sweepers, Cleaners and Related Workers	2.00	-	2	3.08	-	1.98
Protective Service Workers	1.00	-	1	1.54	-	0.99
<b>Farmer, Fisherman, Hunter, Loggers and Related Workers</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>1.54</b>	<b>-</b>	<b>0.99</b>
Fisherman and Related Workers	1.00	-	1	1.54	-	0.99

<b>Production and Related Workers, Transport Equipment Operators and Labourers</b>	<b>25</b>	<b>2</b>	<b>27</b>	<b>38.46</b>	<b>5.56</b>	<b>26.73</b>
Chemical Processors and Related Works	1.00	-	1	1.54	-	0.99
Food and Beverages Processors	2.00	-	2	3.08	-	1.98
Tailors, Dressmakers, Sewers, Upholsterers and Related Workers	5.00	-	5	7.69	-	4.95
Machinery Fitters, Machinery Assemblers, Precision Instrument Makers (except electrical)	1.00	-	1	1.54	-	0.99
Plumbers, Welders, Sheet Metal and Structural Metal Preparers & Electors	3.00	-	3	4.62	2.78	2.97
Rubber and Plastic Product Makers	1.00	1	2	1.54	-	1.98
Printing and Related Workers	1.00	-	1	1.54	-	0.99
Production and Related Workers	2.00	-	2	3.08	-	1.98

Stationary Engines & Related Equipment Operators, Oilers & Greases	1.00	-	1	1.54	-	0.99
Material Handling and Related Equipment Operators, Loaders & Unloaders	1.00	-	1	1.54	-	0.99
Transport Equipment Operators	4.00	-	4	6.15	-	3.96
Labourers n.e.c	3.00	1	4	4.62	2.78	3.96
<b>Total</b>	<b>65</b>	<b>36</b>	<b>101</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## APPENDIX 5

### Occupational Classification of Regular Employed (UPS); Educational Level

National Classification of Occupations	Upto Middle School	Secondary	Higher Secondary	Graduate & Above	Total
<b>MALE</b>					
<b>1. Professional, Technical and Related Workers</b>	-	-	42.86	57.15	100.00
2. Administrative, Executive and Managing Workers	-	20.00	60.00	20.00	100.00
3. Clerical and Related Workers	10.00	20.00	15.00	55.00	100.00
4. Sales Workers	-	50.00	50.00	-	100.00
<b>5. Service Workers</b>	75.00	25.00	-	-	100.00
6. Farmers, Fisherman, Hunters, Loggers and Related Workers	-	-	100.00	-	100.00
7. Production and Related Workers, Transport Equipment Operators and Labourers	22.74	13.64	36.36	27.28	100.00
<b>Total</b>	<b>16.40</b>	<b>16.40</b>	<b>31.14</b>	<b>36.06</b>	<b>100.00</b>
<b>FEMALE</b>					
<b>1. Professional, Technical and Related Workers</b>	-	6.67	6.67	86.66	100.00
2. Administrative, Executive and Managing Workers	-	-	-	-	-
3. Clerical and Related Workers	-	14.28	14.29	71.43	100.00
4. Sales Workers	-	-	-	100.00	100.00
<b>5. Service Workers</b>	-	100.00	-	-	100.00
6. Production and Related Workers, Transport Equipment Operators and Labourers	-	-	50.00	50.00	100.00
<b>Total</b>	-	<b>14.70</b>	<b>11.76</b>	<b>73.53</b>	<b>100.00</b>

**APPENDIX 6**  
**Occupational Classification of Regular Employed UPS ; Agewise (Percentage)**

National Classification of Occupations	Agewise Distribution					
	20-24	25-29	30-39	40-49	50-59	Total
<b>MALE</b>						
<b>1. Professional, Technical and Related Workers</b>	-	37.5	25.00	25.00	12.50	100.00
2. Administrative, Executive and Managing Workers	-	66.67	33.33	-	-	100.00
3. Clerical and Related Workers	9.52	28.57	-	9.52	52.38	100.00
4. Sales Workers	-	-	-	-	100.00	100.00
<b>5. Service Workers</b>	50.00	25.00	-	-	25.00	100.00
6. Farmers, Fisherman, Hunters, Loggers and Related Workers	-	100.00	-	-	-	100.00
7. Production and Related Workers, Transport Equipment Operators and Labourers	-	39.13	21.74	8.70	30.44	100.00
<b>Total</b>	<b>6.56</b>	<b>36.06</b>	<b>13.11</b>	<b>9.84</b>	<b>34.43</b>	<b>100.00</b>
<b>FEMALE</b>						
<b>1. Professional, Technical and Related Workers</b>	-	14.29	4.76	57.14	23.81	100.00
2. Clerical and Related Workers	20.00	10.00	10.00	10.00	50.00	100.00
3. Sales Workers	-	100.00	-	-	-	100.00
<b>4. Service Workers</b>	50.00	50.00	-	-	-	100.00
5. Production and Related Workers, Transport Equipment Operators and Labourers	-	50.00	-	-	50.00	100.00
<b>Total</b>	<b>8.33</b>	<b>19.44</b>	<b>5.56</b>	<b>36.11</b>	<b>30.55</b>	<b>100.00</b>

**APPENDIX 7**  
**Occupational Classification of Self Employed (UPS)**

National Classification of Occupations	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Sales Workers	<b>30.00</b>	-	<b>30</b>	<b>52.63</b>	-	<b>51.72</b>
Merchants and Shopkeepers, Wholesale and Retail Trade	16.00	-	16	28.07	-	27.59
Manufactures, Agents	2.00	-	2	3.51	-	3.45
Sales Workers, n.e.c.	12.00	-	12	21.05	-	20.65
Service Workers	<b>3.00</b>	<b>1</b>	<b>4</b>	<b>5.26</b>	<b>100.0</b>	<b>6.90</b>
Building Caretakers, Sweepers, Cleaners and Related Workers	1.00	1	2	1.75	100.0	3.45
Hair Dressers, Barbers, Beauticians and Related Workers	2.00	-	2	3.51	-	3.45
Farmers, Fisherman and Related Workers	<b>13.00</b>	-	<b>13</b>	<b>22.81</b>	-	<b>22.41</b>
<b>Farm Plantation, Dairy and Other Managers and Supervisors</b>	1.00	-	1	1.75	-	1.72
<b>Other Farm Workers</b>	2.00	-	2	3.51	-	3.45
<b>Fisherman and Related Workers</b>	10.00	-	10	17.54	-	17.24
Production and Related Workers	<b>11.00</b>	-	<b>11</b>	<b>19.30</b>	-	<b>18.97</b>
<b>Tailors, Dressmakers, Sewers, Upholsterers and Related Workers</b>	1.00	-	1	1.75	-	1.72
Blacksmith, Toolmakers and Machine Tool Operators	1.00	-	1	1.75	-	1.72
<b>Machine Fitters, Machine Assemblers, Precision Instrument Maker</b>	3.00	-	3	5.26	-	5.17
Electrical Fitters and Related Electrical and Electronic Workers	3.00	-	3	5.26	-	5.17
Glass Formers, Potters and Related Workers	1.00	-	1	1.75	-	1.72
Printing and Related Workers	2.00	-	2	3.51	-	3.45
<b>Total</b>	<b>57.00</b>	<b>1</b>	<b>58</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## APPENDIX 8

### National Classification of Casual Employment (UPS)

National Classification of Occupation	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Professional Technical and Related Workers	<b>7</b>	<b>1</b>	<b>8</b>	<b>2.12</b>	<b>3.70</b>	<b>2.24</b>
Life Science Technicians	1.00	-	1	0.30	-	0.28
<b>Accountants, Auditors, Related Workers</b>	3.00	1	<b>4</b>	0.91	3.70	1.12
Sculptors, Painters, Photographers and Related Creative Artists	1.00	-	1	0.30	-	0.28
Composers and Performing Artists	2.00	-	2	0.61	-	0.56
<b>Administrative, Executive and managerial workers</b>	<b>2</b>	-	<b>2</b>	0.61	-	0.56
Administrative, Executive and managerial workers	1.00	-	1	0.30	-	0.28
Administrative, Executive and managerial workers, n.e.c	1.00	-	1	0.30	-	0.28
<b>Clerical and Related Workers</b>	<b>17</b>	<b>5</b>	22	5.15	18.52	6.16
Clerical and Related Workers	1.00	-	1	0.30	-	0.28
Clerical and other supervisors	6.00	-	6	1.82	-	1.68
Village officials	1.00	-	1	0.30	-	0.28
Computing and Machine Tool Operators	1.00	5	6	0.30	18.52	1.68
Clerical and Related Workers n.e.c	2.00	-	2	0.61	-	0.56
Transport conductors and Guards	4.00	-	4	1.21	-	1.12

<b>Mail Distributors and Related Workers</b>	1.00	-	1	0.30	-	0.28
<b>Telephone and Telegraph operators</b>	1.00	-	1	0.30	-	0.28
Sales workers	<b>27</b>	<b>4</b>	<b>31</b>	<b>8.18</b>	<b>14.81</b>	<b>8.68</b>
<b>Merchants and Shopkeepers, Wholesale and Retail Trade</b>	4.00	-	4	1.21	-	1.12
<b>Manufacturers, Agents</b>	1.00	-	1	0.30	-	0.28
<b>Technical salesmen and Commercial Travellers</b>	1.00	-	1	0.30	-	0.28
<b>Salesmen, Shop Assistants and Related workers</b>	10.00	4	14	3.03	14.81	3.92
<b>Insurance, Real Estate, Securities and Business Service Salesmen and Auctioners</b>	5.00	-	5	1.52	-	1.40
<b>Money lenders and Pawn brokers</b>	2.00	-	2	0.61	-	0.56
<b>Sales workers n.e.c</b>	4.00	-	4	1.21	-	1.12
Service workers	<b>9</b>	<b>3</b>	12	2.73	11.11	3.36
<b>Hotel and Restaurant keepers</b>	3.00	-	3	0.91	-	0.84
Cooks, Waiters, Bartenders and Related workers (Domestic and Institutional)	1.00	1	2	0.30	3.70	0.56

<b>Building Caretakers, Sweepers, Cleaners and Related workers</b>	1.00	1	2	0.30	3.70	0.56
<b>Service workers, n.e.c</b>	4.00	1	5	1.21	3.70	1.40
Farmers, Fishermen Hunters, Loggers and Related workers	<b>52</b>	<b>3</b>	55	15.76	11.11	15.41
<b>Fishermen and Related workers</b>	52.00	3	55	15.76	11.11	15.41
Production and Related workers, Transport Equipment operators and Labourers	<b>216</b>	<b>11</b>	<b>227</b>	<b>65.45</b>	<b>40.74</b>	<b>63.59</b>
<b>Mineres, Quarrymen, Well Drillers and Related workers</b>	1.00	-	1	0.30	-	0.28
<b>Metal processors</b>	4.00	-	5	1.21	3.70	1.40
<b>Wood preparation workers and paper makers</b>	16.00	-	16	4.85	-	4.48
<b>Food and Beverage processors</b>	1.00	-	1	0.30	-	0.28
<b>Tailors, Dress makers, Sewers. Upholsters and Related workers</b>	4.00	2	6	1.21	7.41	1.68
<b>Stone cutters and Carvers</b>	15.00	-	15	4.55	-	4.20
<b>Blacksmith, Tool makers and Machine Tool Operators</b>	1.00	-	1	0.30	-	0.28
<b>Machinery Fitters, Machine assemblers and precision Instrument makers (Except Electrical)</b>	15.00	-	15	4.55	-	4.20
<b>Electrical Fitters and Related Electrical and Electronic workers</b>	5.00	1	6	0.30	3.70	1.68
<b>Broadcasting station and sound equipment operators and cinema projectionists</b>	3.00	-	3	4.55	-	0.84
<b>Plumbers, Welders, Sheet Metal and Structural metal Preparers and Electors</b>	3.00	-	3	1.52	-	0.84
<b>Glass Formers, Potters and Related workers</b>	1.00	-	1	0.91	-	0.28
<b>Rubber and Plastic Product Makers</b>	4.00	-	4	0.91	-	1.12
<b>Printing and Related workers</b>	1.00	-	1	0.30	-	0.28
<b>Painters</b>	6.00	-	6	1.82	-	1.68
<b>Bricklayers and Other Construction workers</b>	8.00	-	8	2.42	-	2.24
<b>Material Handling and Related Equipment Operators, Loaders and Unloaders</b>	31.00	4	35	9.39	14.81	9.80
<b>Transport Equipment Operators</b>	53.00	3	56	16.06	11.11	15.69
<b>Labourers, n.e.c</b>	44.00	-	44	13.33	-	12.32
<b>Total</b>	<b>330.00</b>	<b>27</b>	357	100.00	100.00	100.00

**APPENDIX 9****Occupational Classification of Casual Employment (UPS); Educational Level (Percentage)**

National Classification of Occupations	Upto Middle School	Secondary	Higher Secondary	Graduate & Above	Total
<b>MALE</b>					
<b>1. Professional, Technical and Related Workers</b>	8.33	16.67	33.33	41.67	100.00
2. Administrative, Executive and Managing Workers	-	-	100.00	-	100.00
3. Clerical and Related Workers	12.5	37.5	6.25	43.75	100.00
4. Sales Workers	33.34	44.44	7.41	14.81	100.00
<b>5. Service Workers</b>	11.11	66.67	22.22	-	100.00
6. Farmers, Fisherman, Hunters, Loggers and Related Workers	66.04	28.3	5.66	-	100.00
7. Production and Related Workers, Transport Equipment Operators and Labourers	48.59	40.57	9.91	0.94	100.00
Total	<b>45.76</b>	<b>38.48</b>	<b>10.30</b>	<b>5.45</b>	<b>100.00</b>
<b>FEMALE</b>					
<b>1. Professional, Technical and Related Workers</b>	-	-	-	100.00	100.00
2. Clerical and Related Workers	-	-	20.00	80.00	100.00
3. Sales Workers	-	50.00	50.00	-	100.00
<b>4. Service Workers</b>	33.33	33.33	33.33	-	100.00
5. Farmers, Fisherman, Hunters, Loggers and Related Workers	100.00	-	-	-	100.00
6. Production and Related Workers, Transport Equipment Operators and Labourers	80.00	-	-	20.00	100.00
Total	<b>46.15</b>	<b>11.54</b>	<b>15.38</b>	<b>26.92</b>	<b>100.00</b>