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Government of Kerala

Sample Registration of Births & Deaths
Kerala 1997

Department of Economics & Statistics
Thiruvananthapuram
June 2002



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PREFACE

The Sample Registration System was introduced in all the States of India under the directions of the Registrar General of India with a view to obtain quick and reliable estimates of vital rates in the country regularly.

This report presents the result of the study in rural areas of Kerala State for the year 1997. The estimates of Vital rates viz. birth rate, death rate, infant mortality rate, etc. and the details of marriages, children ever born and surviving obtained through the study are included in this report.

This report was prepared by the Sample Registration Unit of the Directorate of Economics and Statistics.

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• Sample Registration of Births and Deaths in Kerala (Rural) – 1997

CHAPTER – I

1.1 Introduction

The Sample Registration System, as a dual record system provides reliable vital rates at the National and State level separately for urban and rural areas. The insufficiencies in Civil Registration System have made the Sample Registration System a unique technique for obtaining reliable vital rates. The Department of Economics and Statistics and the Census Departments are the implementing agencies of the system in rural and urban sectors respectively of the State Registrar General is controlling the entire system throughout the country. This report is prepared based on the details collected in the 64th and 65th half yearly surveys of SRS from the 150 selected samples from rural areas of Kerala for the year 1997.

The Sample Registration System was introduced in the State during the year 1964-65 as a pilot project in 20 rural and 5 sample units. The full-fledged scheme was introduced on a regular basis by extending the survey in 150 rural samples in the state on 1st July 1965. The samples originally selected were retained upto the year 1982. Out of the 150 rural samples, 75 samples were replaced in the year 1982 and the remaining 75 samples units by the year 1983. Instead of the stratum wise tables, District level tables have been incorporated in the survey report since 1995.

1.2 Staff engaged in the Survey

The registration of all births and deaths occurred in each sample was carried out by 150 part-time enumerators appointed for the purpose. The half-yearly surveys in these 150 samples were conducted by 17 Statistical Assistants/computers deputed from the Census Department. The Additional District Officers of this department in each district supervised the Fieldwork and conducted re-verification of the unmatched and partially matched events. One RSO, One RA, one computer from Census department and two Compilers attended the Sample Registration work in the Head Quarters.

1.3 Field Work

As per the instruction of the survey, a base line survey was conducted in all the 150 sample units to identify and find the resident population. The births and deaths occurring in these units for the resident population were registered by the Part time enumerators on a regular basis through informants and house visits. The details are reported to the District office and State Head Quarters for each month. The computer supervisor conducted the half yearly survey for updating the population and collected the details of births and deaths occurred in each sample. These two sets of data collected independently by the enumerator and supervisor were matched at the district head quarters to identify the unmatched and partially matched events. The Additional District Officer in the District Office conducted re-verification of these unmatched and partially matched events and then finalised the results and forwarded to the state head quarters. These results were subjected to further scrutiny in the State head quarters and one copy of each of birth and death and population statement containing the details were forwarded to the Registrar General of India for computation of vital rates.

1.4 Overlapping Survey

While conducting the half yearly survey, the supervisor, collected the details of births and deaths occurred during the previous half year also to find out the missed events if any which the enumerator as well as the supervisor had failed to record. Thus 137 births and 58 deaths were detected during the year as the events for the extended reference period.

CHAPTER – II

2.1 Population and its growth

The rural population of Kerala was estimated as 23586491 on 1.7.1997 and 23464628 on 1.1.98. District wise analysis shows that maximum numbers of population were in Malappuram with 3112253 in which the male and female breakup were 1515568 and 1596685 respectively. Thiruvananthapuram District comes next with 2153502 numbers. However a lowest estimated population was in Wayanad district with only 784225 numbers.

2.2 Sex ratio and percentage distribution of population by age group

Sex ratio based on age group was highest in the age of 70 and above with 1263 followed by 2529 and above with 1216. But it was lowest in the age group of 5 – 9 age group having 931.

2.3 Religion wise Population

Classification of estimated population based on religion wise viz. Hindu, Muslim and Christian showed 13184507, 5960422, and 4442825 respectively. Out of the total population 55.9% were Hindus. District wise figures shows that Hindu were maximum in Kollam followed by Thrissur. Muslim was maximum in Malappuram followed by Kozhikode. As regards to Christian population it was maximum in Kottayam followed by Ernakulam.

CHAPTER - III

Measures of Fertility

3.1 Fertility Indicators

The primary components of Fertility is the birth rate, Age specific fertility rate. Total fertility rate and net reproduction rate Estimates of these rates are stated in this chapter.

The number of live births per 1000 mid year population is defined as the birth rate. The births to the rural residents were only taken into account for the calculation of vital rates. The birth rate of Kerala estimated during the year under report was 18.56. When comparing the birth rates of Districts, Malappuram was the highest among the Districts, being 24.93. The lowest birth rate was in Alappuzha district having only 12.07.

Table – I

3.2 Birth rate of Kerala and India (Rural) for the year 1987 to 1997.

| Year | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-------|------|------|------|------|------|------|------|-------|------|------|------|
| BR | 21.5 | 19.9 | 20.2 | 19.6 | 18.4 | 17.6 | 17.5 | 17.26 | 18.1 | 18.0 | 17.9 |
| BR(I) | 33.7 | 33.1 | 32.2 | 31.7 | 30.9 | 30.4 | 30.4 | 30.5 | 30.0 | 27.5 | 27.2 |

3.2 Births rate of Kerala (Rural) and neighbouring States are presented below

| State | Rural | Rural and Urban combined |
|----------------|-------|--------------------------|
| Andhra Pradesh | 23.1 | 22.5 |
| Karnataka | 23.9 | 22.7 |
| Tamil Nadu | 19.3 | 19.0 |
| Kerala | 17.9 | 17.9 |
| All India | 28.9 | 27.2 |

Source: SRS Bulletin

Above table shows that birthrate of Kerala is the lowest among the states with 17.9 and the second one is Tamil Nadu with 19.3.

3.3 Distribuion of Sample units under different rates

The table represents the birth rate of the samples. Out of 150 units 47 numbers have the birth rate between 16 and Less than 20 and 33 numbers have the same between 12 and less than 16.

3.4 Age Specific Fertility rate

Age specific fertility rate can be defined as the number of live birth in an year to 1000 women of a specific age group. Table No.9 represents the age specific fertility rate. Age specific fertility rate was highest in the age group of 20-24 with 148.23. District wise figure shows Age Specific Fertility Rate was highest in Malappuram with 198.28. An overall picture of Age specific Fertility Rate showed that the same in age group 15-19 & 20-24 was highest in Malappuram.

3.5 Age Specific Marital Fertility Rate

Age Specific Marital Fertility Rate is defined as the number of live births in an year to 1000 married women of specific age group. Table 9 A display the District level and state level marital fertility rate during the year under report. Age specific Marital Fertility rate was highest in the age group of 20-24 with 269 followed by 15-19. In the age group of 15-19 ASMFR was highest in Alappuzha District with 1502 and lowest in Kottayam District with 59. In the age group of 20-24 ASMFR was in Wayanad and Idukki Districts with 322 and lowest in Kottayam district with 202.

3.6 Number of Surviving Children and Children ever born in different age group

Table 10 shows the details regarding the number of surviving children and children ever born to the married woman who delivered births during the year under report. It was seen that out of 4536 births events, 2047 numbers were initial birth and 1654 numbers were second births.

3.7 General Fertility Rate (GPR)

The number of live births in an year to 1000 women in the reproductive age group 15-49 is defined as General Fertility Rate. General Fertility Rate of the State was 64.06 during the year. District wise figures shows that it was highest in Malappuram and lowest in Alappuzha District. General Fertility rate from 1988 to 1997 in the State is as follows: -

| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|------|------|------|------|------|------|------|-------|-------|-------|
| 71.5 | 72.2 | 69.8 | 64.8 | 61.6 | 61.2 | 60.0 | 62.87 | 62.57 | 64.06 |

3.8 Total Fertility Rate (TFR)

Total fertility rate is denotes the average number of children that would be born to a woman during her life time, if she passes through the child bearing years conforming the age specific fertility rate of the year. The State level total fertility rate was 1.89 during the year under report. The total fertility rate from 1988 to 1997 is stated below:

| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|------|------|------|------|------|------|------|------|------|------|
| 2.0 | 2.0 | 1.9 | 1.8 | 1.72 | 1.7 | 1.7 | 1.86 | 1.84 | 1.89 |

3.9 Gross Reproduction Rate

Gross Reproduction Rate is defined as the average number of female children that would be born to a woman during her life time, if she passes through her child bearing years conforming to the age specific fertility rate of the year. The gross reproduction rate of the State from 1988 to 1997 are given below:

| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|------|------|------|------|------|------|------|------|------|------|
| 1.00 | 0.95 | 0.92 | 0.92 | 0.82 | 0.83 | 0.80 | 0.90 | 0.89 | 0.88 |

3.10 Net Reproduction Rate (NRR)

Net Reproduction rate is the average number of female children that would be born to a woman during her lifetime conforming to the age group by corresponding proportion of survivors as per life table for female (L_x/l_x) then repeating the process in the gross reproduction rate. Net reproduction rate at the state from 1988 to 1997 is presented below: -

| | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|
| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| 1.00 | 0.95 | 0.91 | 0.91 | 0.81 | 0.83 | 0.79 | 0.90 | 0.89 | 0.87 |

3.11 Still Birth Rate (SBR)

Still Birth Rate is defined as the number of still births to 1000 Births (Both live birth and still birth) Total number of still birth estimated during the year was 3039 in which male and female classification were and 1928 and 1111 respectively. Still birth rate in district wise shows that it was maximum in Malappuram with 967 followed by Kasaragod with 369 while no still birth was reported from Thrissur and Idukki districts. Still birth rate in the state during the year was 6.89.

3.12 Order of Birth by age of mother

Table 15 represents the percentage distribution of birth by age of mother and order of birth of child. Usually the birth order in the State is very less 45.53% of the total births covered in the first birth order and 34.81% in the second birth order. It is obvious that most of women in Kerala delivered only one or two children.

3.13 Birth by type of Medical Attention received

Table 14 represents the details of medical attention received by the women during the delivery period. Out of 4536 events, 4438 numbers had received institutional medical attention i.e. 97.8% of delivery was happened in the medical institutions. All the births in Thiruvananthapuram and Pathanamthitta districts were happened in the medical institutions. Percentage distribution of births by type of medical attention received for the periods from 1988 to 1997 are furnished below:-

| Year | Institutional | Trained Professional | Untrained professional | Non Professional | Not stated |
|------|---------------|----------------------|------------------------|------------------|------------|
| 1988 | 83.1 | 6.8 | 7.9 | 2.0 | 0.2 |
| 1989 | 86.0 | 5.6 | 6.8 | 1.5 | 0.1 |
| 1990 | 89.1 | 3.6 | 5.6 | 1.4 | 0.3 |
| 1991 | 91.1 | 2.7 | 4.9 | 1.2 | 0.1 |
| 1992 | 94.5 | 1.8 | 3.2 | 0.4 | 0.1 |
| 1993 | 96.9 | 1.6 | 0.9 | 0.5 | 0.1 |
| 1994 | 91.9 | 5.4 | 2.2 | 0.2 | 0.3 |
| 1995 | 96.28 | 2.6 | 1.1 | 0.02 | 0.0 |
| 1996 | 96.95 | 1.6 | 1.1 | 0.02 | 0.0 |
| 1997 | 97.8 | 1.0 | 0.9 | 0.3 | - |

3.14 Sex ratio at birth

The number of male children born to 100 female children is defined as the sex ratio at birth. Sex ratio at birth of the state from 1988 to 1997 is stated below: -

| | | | | | | | | | |
|------|-------|-------|------|-------|-------|-------|-------|-------|--------|
| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| 99.3 | 111.3 | 109.3 | 96.5 | 108.2 | 106.2 | 112.3 | 105.4 | 107.2 | 108.26 |

District wise figures shows that the same was highest in Thiruvananthapuram and lowest in Palakkad.

3.15 Child Women Ratio (CWR)

Child women Ratio is defined as the estimated number of children in the age group (0-4) year per 1000 women in the reproductive age group (15-49). According to the survey results the child women ratio during the period was 310.

3.16 Comparison of Vital rates under SRS and CRS

Civil Registration System is the statutory system of recording the details of all births and deaths occurring in the state. While comparing the vital rates obtained under these two systems it is seen that the birth rate obtained through Civil Registration System is lower than that obtained from Sample Registration System. The reason may be that a considerable number of births are left unregistered under Civil Registration System. The birth rates and still births rates arrived from the data collected through Sample Registration System and Civil Registration System for the year 1998 to 1997 are given below:

| Year | Birth Rate | | Still Birth Rate | |
|------|------------|-------|------------------|-------|
| | CRS | SRS | CRS | SRS |
| 1988 | 13.0 | 19.9 | 2.4 | 11.7 |
| 1989 | 12.6 | 20.2 | 3.4 | 10.6 |
| 1990 | 11.6 | 19.6 | 4.5 | 8.6 |
| 1991 | 10.8 | 18.4 | 3.7 | 6.2 |
| 1992 | 9.6 | 17.6 | 3.0 | 10.3 |
| 1993 | 9.4 | 17.5 | 3.0 | 7.6 |
| 1994 | 9.1 | 17.2 | 2.05 | 8.3 |
| 1995 | 9.4 | 18.1 | 3.85 | 6.17 |
| 1996 | 9.4 | 18.0 | 3.07 | 10.53 |
| 1997 | 9.7 | 18.56 | 2.67 | 6.94 |

It is obvious that the birthrate and death rate estimated in SRS are always higher than that in the Civil Registration System.

3.17 Rate of marriage per 1000 population and percentage distribution according to age and sex.

The rate of marriage's and remarriages per 1000 population and percentage distribution of marriages according to age and sex are given in Table 29 appended. The highest rate of first marriage in the case of female was 91.11 in the age group 20-24 and that for males was 74.67 in the age group 25-29. Most of the marriage was occurred at the age of 25-27 to males and 20-24 to females. Usually the percentage of remarriage was very less in all age group.

CHAPTER – IV

Mortality Measures

4.1 Death Rate

The number of deaths per 1000 mid year population is taken as the death rate. The deaths occurred to the usual resident population were considered for calculating the death as per the birth rate. The death rate for the year in Kerala (Rural) was 6.02. District wise figures show that death rate was maximum in Pathanamthitta District with 7.73 followed by Idukki with 7.46. Table No.1 present the death rate in the Districts and State Level.

4.2 Death rate of neighbouring State

The death rates in rural area and rural and urban combined published for the year 1997 by the Registrar General of India in respect of the neighbouring States and All India are given below: -

| State | Rural | Rural – Urban combined |
|----------------|-------|------------------------|
| Andhra Pradesh | 9.1 | 8.3 |
| Karnataka | 8.5 | 7.6 |
| Tamil Nadu | 8.7 | 8.0 |
| Kerala | 6.3 | 6.2 |
| All India | 9.6 | 8.9 |

Comparing the death rates in rural areas of the neighbouring States Andhra Pradesh recorded the highest death rate (9.1) while Kerala recorded the lowest death rate (6.3) for the year.

4.3 Age specific death rate

Age specific death rate is the number of deaths in a specific age group among 1000 persons of that age group in an year. Out of 142086 estimated death events in the state, 66059 deaths were occurred at the age of 70 and above and in which the classification of males and females were 35098 and 30961 respectively. Age group at 30 and above, the number of deaths was increasing continuously. District wise analysis shows that maximum number of deaths estimated were in Thrissur District with 15582 followed by Thiruvananthapuram with 14353 numbers. The minimum number of death estimated were in Wayand District with 3709 followed by Kasaragod with 6459 numbers..

4.4 Infant Mortality rate

The infant mortality rate is defined as the estimated number of deaths of children below one year of age out of 1000 live births in an year. As far as Kerala (Rural) concerned the infant mortality rate during 1996 is 18.06 whereas that for 1997 ism 18.81. Number of infant deaths estimated during the year under report was 8234 in which the males and females division were 4226 and 4008 respectively District wise figures shows that infant deaths were estimated maximum in Malappuram with 1380 numbers, in which tthe males and females divisions were 828 and 552 respectively. Palakkad comes in the second place with 1050 while it was estimated minimum in Kollam district with 112 number.

4.5 Neo Natal Mortality Rate

Neo natal mortality rate is defined as the estimated number of deaths of infants below 28 days of age per 1000 live births in an year. Neo natal mortality rate estimated during the year under report was 11.51 in the State.

4.6 Perinatal mortality rate

Perinatal mortality rate defined as the estimated number of deaths of infants below 7 days of age per 1000 live births in an year. The estimated Perinatal mortality rate during the year under report was 9.13. The classification of infant mortality rate as perinatal, neo natal and postnatal is given in Table No. 26

4.7 Distribution of Samples according to death rate of each sample

Table 22 appended gives the distribution of samples according to death rates for 1997. During the year under report 52 units recorded death rate between 5 to 7 of 45 samples in the range of 3 to 5, and 26 samples have death rate 7 to 9. However no samples has death rate more than 15.

4.8 Medical attendance received before death

The percentage distribution of deaths according to type of medical attention received for the year 1988 to 1997 are stated below:

| Year | Institutional | Qualified medical practitioner | Unqualified medical practitioner | None |
|------|---------------|--------------------------------|----------------------------------|------|
| 1988 | 42 | 32 | 7 | 19 |
| 1989 | 43 | 31 | 6 | 20 |
| 1990 | 47 | 36 | 7 | 10 |
| 1991 | 45 | 35 | 5 | 15 |
| 1992 | 54 | 29 | 4 | 13 |
| 1993 | 58 | 21 | 4 | 17 |
| 1994 | 57 | 20 | 4 | 19 |
| 1995 | 51 | 32 | 11 | 6 |
| 1996 | 51 | 36 | 4 | 9 |
| 1997 | 60 | 27 | 4 | 9 |

Table 21 represents deaths classified by type of medical attention. It can be seen that about 91 percent of the persons were received some kind of attention before death in the current year.

4.9 Comparison of rural mortality rate under Civil Registration System and SRS for the year from 1988 to 1997

MORTALITY RATE UNDER CRS AND SRS

| Year | Death Rate | | Infant Mortality Rate | |
|------|------------|-----|-----------------------|------|
| | CRS | SRS | CRS | SRS |
| 1988 | 4.1 | 6.3 | 7.3 | 29.9 |
| 1989 | 4.2 | 6.1 | 8.2 | 23.3 |
| 1990 | 4.1 | 6.0 | 8.1 | 17.1 |
| 1991 | 4.3 | 6.2 | 7.5 | 16.6 |
| 1992 | 4.5 | 6.3 | 5.2 | 17.0 |
| 1993 | 4.3 | 6.1 | 5.8 | 14.8 |
| 1994 | 4.3 | 5.9 | 7.1 | 16.0 |
| 1995 | 4.2 | 5.4 | 6.5 | 14.4 |
| 1996 | 4.3 | 6.2 | 5.8 | 13.0 |
| 1997 | 4.2 | 6.0 | 5.0 | 18.8 |

Vital rates i.e. the death rate and infant mortality rate, estimated under Civil Registration System are less than that of the rates arrived through Sample Registration System. The low mortality rate under Civil Registration System may be due to the fact that a considerable number of births and death of the resident population in rural areas are registered in urban areas where they seek better medical attention.

4.10 Expectation of life based on age specific death rates for the last three years.

Expectation of life in different age group is calculated in the life tables – Table No. 30, 31, 32 appended to this report. The life tables prepared sex wise and population wise separately based on Age specific death rates 1995, 1996, 1997. The expectation of life at birth for males, females and for both sex together were calculated as 70.2, 77.5, 73.6 respectively. Expectation of life of females is seen always higher than that of males. The expectation of life calculated for the last 10 years are given below:

Expectation of life based on age specific death rates

| Age specific death rates for the year | | | Male | Female | Both Sex |
|---------------------------------------|------|------|------|--------|----------|
| 1986 | 1987 | 1988 | 67.0 | 73.5 | 70.2 |
| 1987 | 1988 | 1989 | 67.6 | 73.9 | 70.6 |
| 1988 | 1989 | 1990 | 67.9 | 74.7 | 71.3 |
| 1989 | 1990 | 1991 | 68.1 | 74.7 | 71.3 |
| 1990 | 1991 | 1992 | 67.9 | 74.8 | 71.2 |
| 1991 | 1992 | 1993 | 68.3 | 75.2 | 71.6 |
| 1992 | 1993 | 1994 | 64.3 | 65.2 | 67.5 |
| 1993 | 1994 | 1995 | 70.2 | 76.2 | 73.3 |
| 1994 | 1995 | 1996 | 70.4 | 76.8 | 73.5 |
| 1995 | 1996 | 1997 | 70.2 | 77.5 | 73.6 |

4.12 Method adopted for calculation of Life Table

$$nm_x = \frac{\text{Total Age specific death rates for the last three years}}{3 \times 1000}$$

$$q_0 = \frac{D_1}{B_1} + \frac{D_2}{B_2}$$

Where D_1 is the number of deaths of children born during 1996 and died in 1997. D_2 is that of the children born and died in 1997. B_1 and B_2 denote the total number of births occurred during 1996 and 1997 respectively.

$$Q_x = \frac{2 \times (c \times nm_x)}{2x + (c \times nm_x)} \quad \text{Where } c \text{ is the class interval}$$

Let l_0 be 1,00,000

$$l_x = l_0 - d_x$$

$$d_x = l_x \times q_x$$

$$\text{Let } d_{70} = l_{70}$$

$$L_0 = f \times l_0 + (1 - f) l_1$$

where $f =$

$$\frac{D_1}{D_1 + D_2}$$

$$L_x = \frac{(l_x + l_{x+1}) \times c}{2}$$

$$L_{70} = \frac{d_{70}}{nm_{70}}$$

Let L_{70} be T_{70}

$$T_{(70-1)} = T_{70} + L_{(70-1)}$$

$$\text{Expectation of Life} = E_x = \frac{T_x}{l_x}$$

Table -1
Midyear estimated population, Births, Deaths and Vital rates 97

| District | Population | Estimated figures | | | | Vital Rates | | | |
|--------------------|------------|-------------------|--------|--------------|--------------|-------------|-------|--------------|--------------|
| | | Births | Death | Still Births | Infant Death | Births | Death | Still Births | Infant Death |
| Kasargod | 1050293 | 25558 | 6459 | 369 | 646 | 24.33 | 6.15 | 14.23 | 25.28 |
| Kannur | 1228764 | 24738 | 7068 | 295 | 687 | 20.13 | 5.75 | 11.78 | 27.77 |
| Wayanad | 784225 | 16915 | 3709 | 90 | 181 | 21.57 | 4.73 | 5.29 | 10.70 |
| Kozhikode | 1778807 | 32182 | 11136 | 306 | 817 | 18.09 | 6.26 | 9.42 | 25.39 |
| Malappura | 3112253 | 77597 | 14291 | 967 | 1381 | 24.93 | 4.59 | 12.31 | 17.80 |
| Palakkad | 2142907 | 41586 | 11159 | 95 | 1049 | 19.41 | 5.21 | 2.28 | 25.22 |
| Thrissur | 2105319 | 36541 | 15582 | 0 | 658 | 17.36 | 7.40 | 0.00 | 18.01 |
| Ernakulam | 1643324 | 28264 | 7965 | 128 | 514 | 17.20 | 4.85 | 4.51 | 18.19 |
| Idukki | 1139232 | 23218 | 8499 | 0 | 622 | 20.38 | 7.46 | 0.00 | 26.79 |
| Kottayam | 1647302 | 27199 | 10345 | 116 | 349 | 16.51 | 6.28 | 4.25 | 12.83 |
| Alappuzha | 1560530 | 18837 | 10330 | 122 | 122 | 12.07 | 6.62 | 6.43 | 6.48 |
| Pathanamthitta | 1114135 | 15931 | 8615 | 118 | 472 | 14.30 | 7.73 | 7.35 | 29.63 |
| Kollam | 2125898 | 30763 | 12575 | 225 | 112 | 14.47 | 5.92 | 7.26 | 3.64 |
| Thiruvananthapuram | 2153502 | 38481 | 14353 | 208 | 624 | 17.87 | 6.66 | 5.38 | 16.22 |
| State | 23586491 | 437810 | 142086 | 3039 | 8234 | 18.56 | 6.02 | 6.89 | 18.81 |

Table 2
Sample Population and Estimated Population

(District wise)

| District | Observed Population | | Estimated Population | |
|--------------------|---------------------|-----------------|----------------------|-----------------|
| | As on 01-Jul-97 | As on 01-Jul-98 | As on 01-Jul-97 | As on 01-Jul-98 |
| Kasargod | 11383 | 11478 | 1050293 | 1059059 |
| Kannur | 12517 | 12532 | 1228764 | 1230237 |
| Wayanad | 8670 | 8699 | 784225 | 786848 |
| Kozhikode | 17411 | 17441 | 1778807 | 1781872 |
| Malappuram | 45081 | 44772 | 3112253 | 3090921 |
| Palakkad | 22467 | 22407 | 2142907 | 2137184 |
| Thrissur | 19186 | 18887 | 2105319 | 2072510 |
| Ernakulam | 12791 | 12588 | 1643324 | 1617243 |
| Idukki | 10991 | 10768 | 1139232 | 1116118 |
| Kottayam | 14172 | 14083 | 1647302 | 1636957 |
| Alappuzha | 12841 | 12721 | 1560530 | 1545946 |
| Pathanamthitta | 9441 | 9435 | 1114135 | 1113427 |
| Kollam | 18935 | 18913 | 2125898 | 2123428 |
| Thiruvananthapuram | 20706 | 20700 | 2153502 | 2152878 |
| State | 236592 | 235424 | 23586491 | 23464628 |

Table 3
Population according to Sex 1997

| Districts | Observed Population | | | Estimated Population | | |
|--------------------|---------------------|--------|--------|----------------------|----------|----------|
| | Male | Female | Total | Male | Female | Total |
| Kasargod | 5554 | 5829 | 11383 | 512460 | 537834 | 1050293 |
| Kannur | 6014 | 6503 | 12517 | 590380 | 638384 | 1228764 |
| Wayanad | 4263 | 4407 | 8670 | 385600 | 398625 | 784225 |
| Kozhikode | 8360 | 9051 | 17411 | 854105 | 924702 | 1778807 |
| Malappuram | 21953 | 23128 | 45081 | 1515568 | 1596685 | 3112253 |
| Palakkad | 10760 | 11707 | 22467 | 1026291 | 1116616 | 2142907 |
| Thrissur | 9089 | 10097 | 19186 | 997355 | 1107964 | 2105319 |
| Ernakulam | 6435 | 6356 | 12791 | 826737 | 816587 | 1643324 |
| Idukki | 5473 | 5518 | 10991 | 567284 | 571948 | 1139232 |
| Kottayam | 7064 | 7108 | 14172 | 821094 | 826208 | 1647302 |
| Alappuzha | 6158 | 6683 | 12841 | 748364 | 812166 | 1560530 |
| Pathanamthitta | 4499 | 4942 | 9441 | 530928 | 583207 | 1114135 |
| Kollam | 9217 | 9718 | 18935 | 1034825 | 1091073 | 2125898 |
| Thiruvananthapuram | 9993 | 10713 | 20706 | 1039310 | 1114192 | 2153502 |
| State | 114832 | 121760 | 236592 | 11450301 | 12136190 | 23586491 |

Table 4
Midyear Sample Population & Estimated Population - According to Age and Sex

| Age group | Observed | | | Estimated Population | | |
|-----------|----------|--------|--------|----------------------|----------|----------|
| | Male | Female | Total | Male | Female | Total |
| Below 1 | 2313 | 2144 | 4457 | 225038 | 210509 | 435547 |
| 1-4 | 8916 | 8433 | 17349 | 869032 | 823890 | 1692922 |
| 5-9 | 11230 | 10455 | 21685 | 1093451 | 1012881 | 2106332 |
| 10-14 | 12678 | 12076 | 24754 | 1234114 | 1176795 | 2410909 |
| 15-19 | 12043 | 12703 | 24746 | 1181179 | 1239089 | 2420268 |
| 20-24 | 11106 | 12435 | 23541 | 1101493 | 1233181 | 2334674 |
| 25-29 | 9602 | 11676 | 21278 | 967266 | 1175931 | 2143197 |
| 30-34 | 8552 | 9587 | 18139 | 862280 | 960199 | 1822480 |
| 35-39 | 7652 | 8981 | 16633 | 777121 | 904991 | 1682112 |
| 40-44 | 6986 | 7128 | 14114 | 707859 | 719782 | 1427641 |
| 45-49 | 5920 | 5912 | 11832 | 601303 | 601290 | 1202593 |
| 50-54 | 4389 | 4696 | 9085 | 445198 | 476644 | 921842 |
| 55-59 | 3773 | 4161 | 7934 | 386128 | 424447 | 810575 |
| 60-64 | 3482 | 3806 | 7288 | 355832 | 389225 | 745057 |
| 65-69 | 2652 | 3098 | 5750 | 273353 | 320687 | 594040 |
| 70-74 | 1728 | 2079 | 3807 | 179642 | 215775 | 395417 |
| 75-79 | 953 | 1203 | 2156 | 99549 | 125708 | 225257 |
| 80-84 | 530 | 720 | 1250 | 55920 | 75935 | 131855 |
| 85+ | 327 | 467 | 794 | 34539 | 49235 | 83774 |
| All Ages | 114832 | 121760 | 236592 | 11450297 | 12136194 | 23586491 |

Table- 5
Sex Ratio & Percentage distribution of population by age group - 1997

| FI | Age group | SexRatio97 | %Population |
|----|--------------|------------|-------------|
| 1 | 0 to 4 | 942 | 9.22 |
| 3 | 5 - 9 | 931 | 9.17 |
| 4 | 10 - 14 | 953 | 10.46 |
| 5 | 15 - 19 | 1055 | 10.46 |
| 6 | 20 - 24 | 1120 | 9.95 |
| 7 | 25 - 29 | 1216 | 8.99 |
| 8 | 30 - 34 | 1121 | 7.67 |
| 9 | 35 - 39 | 1174 | 7.03 |
| 10 | 40 - 44 | 1020 | 5.97 |
| 11 | 45 - 49 | 999 | 5.00 |
| 13 | 50 - 54 | 1070 | 3.84 |
| 14 | 55 - 59 | 1103 | 3.35 |
| 15 | 60 - 64 | 1093 | 3.08 |
| 16 | 65 - 69 | 1168 | 2.43 |
| 18 | 70 and Above | 1263 | 3.38 |
| 21 | All Ages | 1060 | 100.00 |

Note: :Calculation Based on Observed population

Table 6
Religion wise Population -Sample and Estimated Population (District wise)

| District | Sample | | | | Estimated | | | |
|--------------------|--------|-----------|--------|--------|-----------|-----------|---------|----------|
| | Hindu | Christian | Muslim | Total | Hindu | Christian | Muslim | Total |
| Kasargod | 6820 | 462 | 4101 | 11383 | 629272 | 42628 | 378393 | 1050293 |
| Kannur | 5085 | 2681 | 4751 | 12517 | 499182 | 263188 | 466394 | 1228764 |
| Wayanad | 5019 | 1486 | 2165 | 8670 | 453982 | 134413 | 195830 | 784225 |
| Kozhikode | 10751 | 349 | 6310 | 17410 | 1098383 | 35656 | 644666 | 1778705 |
| Malappuram | 14206 | 642 | 30230 | 45078 | 980738 | 44322 | 2086986 | 3112046 |
| Palakkad | 15504 | 827 | 6136 | 22467 | 1478775 | 78879 | 585253 | 2142907 |
| Thrissur | 13576 | 2778 | 2834 | 19188 | 1489723 | 304835 | 310981 | 2105539 |
| Ernakulam | 4770 | 4762 | 3259 | 12791 | 612826 | 611798 | 418700 | 1643324 |
| Idukki | 5296 | 4554 | 1142 | 10992 | 548938 | 472028 | 118370 | 1139336 |
| Kottayam | 7243 | 6059 | 870 | 14172 | 841900 | 704276 | 101126 | 1647302 |
| Alappuzha | 8357 | 3527 | 957 | 12841 | 1015602 | 428627 | 116301 | 1560530 |
| Pathanamthitta | 4457 | 4799 | 185 | 9441 | 525972 | 566331 | 21832 | 1114135 |
| Kollam | 14019 | 1817 | 3099 | 18935 | 1573962 | 204000 | 347936 | 2125898 |
| Thiruvananthapuram | 13800 | 5306 | 1612 | 20718 | 1435252 | 551844 | 167654 | 2154750 |
| State | 128903 | 40049 | 67651 | 236603 | 13184507 | 4442825 | 5960422 | 23587754 |

Table 7
District wise live Births Observed and Estimated in Samples according to Sex

| Dist | Male | Female | Total | Sex Ratio at Birth | E M | E F | E Tot |
|----------------|-------------|-------------|-------------|--------------------|---------------|---------------|---------------|
| Kasargod | 149 | 128 | 277 | 116.41 | 13748 | 11810 | 25558 |
| Kannur | 126 | 126 | 252 | 100.00 | 12369 | 12369 | 24738 |
| Kozhikode | 176 | 139 | 315 | 126.62 | 17981 | 14201 | 32182 |
| Wayanad | 107 | 80 | 187 | 133.75 | 9678 | 7237 | 16915 |
| Malappuram | 597 | 527 | 1124 | 113.28 | 41215 | 36382 | 77597 |
| Palakkad | 204 | 232 | 436 | 87.93 | 19458 | 22128 | 41586 |
| Thrissur | 161 | 172 | 333 | 93.60 | 17667 | 18874 | 36541 |
| Ernakulam | 121 | 99 | 220 | 122.22 | 15545 | 12719 | 28264 |
| Idukki | 110 | 114 | 224 | 96.49 | 11402 | 11816 | 23218 |
| Kottayam | 110 | 124 | 234 | 88.71 | 12786 | 14413 | 27199 |
| Alappuzha | 78 | 77 | 155 | 101.30 | 9479 | 9358 | 18837 |
| Pathanamthitta | 74 | 61 | 135 | 121.31 | 8733 | 7198 | 15931 |
| Kollam | 133 | 141 | 274 | 94.33 | 14932 | 15831 | 30763 |
| Thiruvananthap | 212 | 158 | 370 | 134.18 | 22049 | 16432 | 38481 |
| State | 2358 | 2178 | 4536 | 108.26 | 227042 | 210768 | 437810 |

Table 8A-1
Observed number of Total Women in different age Group

| District | Age Group of Women | | | | | | | Total |
|----------------|--------------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 660 | 680 | 549 | 394 | 409 | 278 | 288 | 3258 |
| Kannur | 803 | 640 | 577 | 441 | 485 | 334 | 294 | 3574 |
| Kozhikode | 493 | 517 | 448 | 392 | 325 | 271 | 177 | 2623 |
| Wayanad | 952 | 877 | 970 | 604 | 750 | 418 | 508 | 5078 |
| Malappuram | 2888 | 2446 | 1940 | 1816 | 1515 | 1261 | 871 | 12934 |
| Palakkad | 1318 | 1201 | 1098 | 828 | 773 | 575 | 560 | 6353 |
| Thrissur | 891 | 928 | 978 | 878 | 725 | 699 | 497 | 5596 |
| Ernakulam | 588 | 699 | 645 | 577 | 499 | 412 | 316 | 3736 |
| Idukki | 514 | 629 | 589 | 525 | 418 | 392 | 291 | 3358 |
| Kottayam | 581 | 668 | 711 | 569 | 562 | 431 | 381 | 3903 |
| Alappuzha | 604 | 626 | 695 | 560 | 508 | 480 | 352 | 3825 |
| Pathanamthitta | 442 | 443 | 480 | 394 | 433 | 328 | 312 | 2833 |
| Kollam | 961 | 1036 | 940 | 740 | 717 | 595 | 539 | 5528 |
| Thiruvananthap | 1008 | 1045 | 1056 | 869 | 862 | 654 | 526 | 6017 |
| State | 12703 | 12435 | 11676 | 9587 | 8981 | 7128 | 5912 | 68616 |

Table 8A-2
Estimated number of Total Women in different age Group

| District | Age Group of Women | | | | | | | Total |
|--------------------|--------------------|---------|---------|--------|--------|--------|--------|---------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 60897 | 62743 | 50655 | 36354 | 37738 | 25651 | 26573 | 300611 |
| Kannur | 78829 | 62827 | 56643 | 43292 | 47611 | 32788 | 28861 | 350851 |
| Kozhikode | 97262 | 89599 | 99101 | 61708 | 76624 | 42705 | 51900 | 518899 |
| Wayanad | 44593 | 46764 | 40523 | 35457 | 29397 | 24513 | 16010 | 237257 |
| Malappuram | 199379 | 168864 | 133932 | 125371 | 104591 | 87056 | 60131 | 879324 |
| Palakkad | 125711 | 114552 | 104727 | 78975 | 73729 | 54844 | 53413 | 605951 |
| Thrissur | 97771 | 101831 | 107318 | 96345 | 79556 | 76703 | 54537 | 614061 |
| Eranakulam | 75543 | 89804 | 82866 | 74130 | 64109 | 52932 | 40598 | 479982 |
| Idukki | 53277 | 65197 | 61051 | 54417 | 43326 | 40631 | 30163 | 348062 |
| Kottayam | 67533 | 77646 | 82644 | 66138 | 65325 | 50098 | 44286 | 453670 |
| Alappuzha | 73402 | 76076 | 84461 | 68055 | 61736 | 58333 | 42778 | 464841 |
| Pathanamthitta | 52161 | 52279 | 56645 | 46496 | 51098 | 38707 | 36819 | 334205 |
| Kollam | 107895 | 116315 | 105537 | 83082 | 80500 | 66803 | 60515 | 620647 |
| Thiruvananthapuram | 104836 | 108684 | 109828 | 90379 | 89651 | 68018 | 54706 | 626102 |
| State | 1239089 | 1233181 | 1175931 | 960199 | 904991 | 719782 | 601290 | 6834463 |

Table 8B-1
Observed number of Married Women in different age Group

| Dist | Age Group of Women | | | | | | | Total |
|--------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 87 | 391 | 462 | 343 | 343 | 217 | 228 | 2071 |
| Kannur | 101 | 397 | 516 | 405 | 422 | 275 | 230 | 2346 |
| Kozhikode | 64 | 311 | 396 | 341 | 296 | 234 | 132 | 1774 |
| Wayanad | 181 | 658 | 896 | 536 | 684 | 338 | 402 | 3695 |
| Malappuram | 703 | 1737 | 1643 | 1580 | 1298 | 1044 | 670 | 8675 |
| Palakkad | 246 | 718 | 893 | 712 | 680 | 473 | 448 | 4170 |
| Thrissur | 35 | 451 | 833 | 802 | 650 | 614 | 395 | 3780 |
| Eranakulam | 7 | 259 | 498 | 533 | 464 | 377 | 268 | 2406 |
| Idukki | 27 | 258 | 464 | 476 | 370 | 351 | 241 | 2187 |
| Kottayam | 17 | 341 | 615 | 528 | 518 | 391 | 330 | 2740 |
| Alappuzha | 2 | 213 | 573 | 523 | 468 | 436 | 304 | 2519 |
| Pathanamthitta | 15 | 199 | 411 | 376 | 413 | 308 | 285 | 2007 |
| Kollam | 36 | 542 | 809 | 656 | 654 | 515 | 448 | 3660 |
| Thiruvananthapuram | 43 | 579 | 881 | 769 | 769 | 557 | 421 | 4019 |
| State | 1564 | 7054 | 9890 | 8580 | 8029 | 6130 | 4802 | 46049 |

Table 8 B-2
Estimated number of Married Women in different age Group

| District | Age Group of Women | | | | | | | Total |
|--------------------|--------------------|--------|--------|--------|--------|--------|--------|---------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 8027 | 36077 | 42628 | 31648 | 31648 | 20022 | 21037 | 191087 |
| Kannur | 9915 | 38973 | 50654 | 39758 | 41427 | 26996 | 22579 | 230302 |
| Kozhikode | 18492 | 67225 | 91540 | 54761 | 69881 | 34532 | 41071 | 377502 |
| Wayanad | 5789 | 28131 | 35819 | 30844 | 26774 | 21166 | 11940 | 160463 |
| Malappuram | 48533 | 119917 | 113428 | 109078 | 89610 | 72075 | 46255 | 598896 |
| Palakkad | 23464 | 68483 | 85175 | 67911 | 64859 | 45115 | 42730 | 397737 |
| Thrissur | 3841 | 49489 | 91407 | 88005 | 71326 | 67375 | 43344 | 414787 |
| Eranakulam | 899 | 33275 | 63981 | 68477 | 59612 | 48435 | 34431 | 309110 |
| Idukki | 2799 | 26742 | 48094 | 49338 | 38351 | 36382 | 24980 | 226686 |
| Kottayam | 1976 | 39637 | 71485 | 61373 | 60210 | 45448 | 38358 | 318487 |
| Alappuzha | 243 | 25885 | 69635 | 63559 | 56875 | 52986 | 36944 | 306127 |
| Pathanamthitta | 1770 | 23484 | 48502 | 44372 | 48738 | 36347 | 33633 | 236846 |
| Kollam | 4042 | 60852 | 90829 | 73651 | 73427 | 57821 | 50299 | 410921 |
| Thiruvananthapuram | 4472 | 60218 | 91627 | 79979 | 79979 | 57930 | 43786 | 417991 |
| State | 134262 | 678388 | 994804 | 862754 | 812717 | 622630 | 491387 | 4596942 |

Table 8C-1

Observed number of Live Births in different age Group

| District | Age Group of Women | | | | | | | Total |
|--------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 33 | 105 | 99 | 29 | 9 | 2 | | 277 |
| Kannur | 23 | 114 | 85 | 20 | 9 | 1 | | 252 |
| Kozhikode | 19 | 100 | 52 | 12 | 4 | | | 187 |
| Wayanad | 19 | 158 | 96 | 37 | 3 | 2 | | 315 |
| Malappuram | 163 | 485 | 296 | 129 | 42 | 7 | 2 | 1124 |
| Palakkad | 74 | 193 | 129 | 26 | 11 | 2 | 1 | 436 |
| Thrissur | 14 | 132 | 146 | 33 | 7 | 1 | | 333 |
| Eranakulam | 1 | 67 | 116 | 30 | 5 | 1 | | 220 |
| Idukki | 8 | 83 | 87 | 41 | 4 | 1 | | 224 |
| Kottayam | 1 | 69 | 117 | 41 | 5 | 1 | | 234 |
| Alappuzha | 3 | 68 | 58 | 20 | 6 | | | 155 |
| Pathanamthitta | 1 | 42 | 60 | 28 | 3 | | 1 | 135 |
| Kollam | 4 | 123 | 116 | 28 | 3 | | | 274 |
| Thiruvananthapuram | 17 | 174 | 136 | 33 | 9 | 1 | | 370 |
| State | 380 | 1913 | 1593 | 507 | 120 | 19 | 4 | 4536 |

Table 8C-2
Estimated number of Live Births in different age Group

(Decimal adjustment)

| Dist | Age Group of Women | | | | | | | Total |
|--------------------|--------------------|---------------|---------------|--------------|--------------|-------------|------------|---------------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| Kasargod | 3045 | 9688 | 9135 | 2676 | 830 | 185 | 0 | 25558 |
| Kannur | 2258 | 11191 | 8344 | 1963 | 884 | 98 | 0 | 24738 |
| Kozhikode | 1941 | 16142 | 9808 | 3780 | 306 | 204 | 0 | 32182 |
| Wayanad | 1719 | 9045 | 4704 | 1085 | 362 | 0 | 0 | 16915 |
| Malappuram | 11253 | 33483 | 20435 | 8906 | 2900 | 483 | 138 | 77597 |
| Palakkad | 7058 | 18408 | 12304 | 2480 | 1049 | 191 | 95 | 41586 |
| Thrissur | 1536 | 14485 | 16021 | 3621 | 768 | 110 | 0 | 36541 |
| Ernakulam | 128 | 8608 | 14903 | 3854 | 642 | 128 | 0 | 28264 |
| Idukki | 829 | 8603 | 9018 | 4250 | 415 | 104 | 0 | 23218 |
| Kottayam | 116 | 8020 | 13600 | 4766 | 581 | 116 | 0 | 27199 |
| Alappuzha | 365 | 8264 | 7049 | 2431 | 729 | 0 | 0 | 18837 |
| Pathanamthitta | 118 | 4956 | 7081 | 3304 | 354 | 0 | 118 | 15931 |
| Kollam | 449 | 13810 | 13024 | 3144 | 337 | 0 | 0 | 30763 |
| Thiruvananthapuram | 1768 | 18097 | 14145 | 3432 | 936 | 104 | 0 | 38481 |
| State | 32583 | 182800 | 159571 | 49692 | 11093 | 1723 | 351 | 437810 |

Table 9 A
Age Specific Fertility Rate

| District | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | GFR | TFR |
|--------------------|-------|--------|--------|-------|-------|-------|-------|-------|------|
| Kasargod | 50.00 | 154.41 | 180.34 | 73.61 | 21.99 | 7.21 | 0.00 | 85.02 | 2.44 |
| Kannur | 28.64 | 178.12 | 147.31 | 45.34 | 18.57 | 2.99 | 0.00 | 70.51 | 2.10 |
| Kozhikode | 19.96 | 180.16 | 98.97 | 61.26 | 3.99 | 4.78 | 0.00 | 62.02 | 1.85 |
| Wayanad | 38.55 | 193.42 | 116.08 | 30.60 | 12.31 | 0.00 | 0.00 | 71.29 | 1.95 |
| Malappuram | 56.44 | 198.28 | 152.58 | 71.04 | 27.73 | 5.55 | 2.29 | 88.25 | 2.57 |
| Palakkad | 56.14 | 160.70 | 117.49 | 31.40 | 14.23 | 3.48 | 1.78 | 68.63 | 1.93 |
| Thrissur | 15.71 | 142.25 | 149.29 | 37.58 | 9.65 | 1.43 | 0.00 | 59.51 | 1.78 |
| Ernakulam | 1.69 | 95.85 | 179.84 | 51.99 | 10.01 | 2.42 | 0.00 | 58.89 | 1.71 |
| Idukki | 15.56 | 131.95 | 147.71 | 78.10 | 9.58 | 2.56 | 0.00 | 66.71 | 1.93 |
| Kottayam | 1.72 | 103.29 | 164.56 | 72.06 | 8.89 | 2.32 | 0.00 | 59.95 | 1.76 |
| Alappuzha | 4.97 | 108.63 | 83.46 | 35.72 | 11.81 | 0.00 | 0.00 | 40.52 | 1.22 |
| Pathanamthitta | 2.26 | 94.80 | 125.01 | 71.06 | 6.93 | 0.00 | 3.20 | 47.67 | 1.52 |
| Kollam | 4.16 | 118.73 | 123.41 | 37.84 | 4.19 | 0.00 | 0.00 | 49.57 | 1.44 |
| Thiruvananthapuram | 16.86 | 166.51 | 128.79 | 37.97 | 10.44 | 1.53 | 0.00 | 61.46 | 1.81 |
| State (avg) | 26.30 | 148.23 | 135.70 | 51.75 | 12.26 | 2.39 | 0.58 | 64.06 | 1.89 |
| Female | 13.54 | 72.40 | 59.43 | 22.35 | 6.16 | 1.03 | 0.27 | 29.83 | 0.88 |

Table 9A
Age specific Marital Fertility Rate (8c*1000/8b)

| District | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
|----------------|-------|-------|-------|-------|-------|-------|-------|
| Kasargod | 379 | 269 | 214 | 85 | 26 | 9 | 0 |
| Kannur | 228 | 287 | 165 | 49 | 21 | 4 | 0 |
| Kozhikode | 105 | 240 | 107 | 69 | 4 | 6 | 0 |
| Wayanad | 297 | 322 | 131 | 35 | 14 | 0 | 0 |
| Malappuram | 232 | 279 | 180 | 82 | 32 | 7 | 3 |
| Palakkad | 301 | 269 | 144 | 37 | 16 | 4 | 2 |
| Thrissur | 400 | 293 | 175 | 41 | 11 | 2 | 0 |
| Ernakulam | 142 | 259 | 233 | 56 | 11 | 3 | 0 |
| Idukki | 296 | 322 | 188 | 86 | 11 | 3 | 0 |
| Kottayam | 59 | 202 | 190 | 78 | 10 | 3 | 0 |
| Alappuzha | 1502 | 319 | 101 | 38 | 13 | 0 | 0 |
| Pathanamthitta | 67 | 211 | 146 | 74 | 7 | 0 | 4 |
| Kollam | 111 | 227 | 143 | 43 | 5 | 0 | 0 |
| Thiruvananthap | 395 | 301 | 154 | 43 | 12 | 2 | 0 |
| State | 243 | 269 | 160 | 58 | 14 | 3 | 1 |

Table 10
Distribution of currently married women observed according to
Age and number of surviving children 1997

| Age group of mother | No. of Surviving Children | | | | | | | Total |
|---------------------|---------------------------|-------------|------------|------------|-----------|-----------|-----------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 & above | |
| 15-19 | 346 | 33 | 1 | | | | | 380 |
| 20-24 | 1106 | 635 | 157 | 14 | | 1 | | 1913 |
| 25-29 | 507 | 725 | 257 | 86 | 11 | 5 | 2 | 1593 |
| 30-34 | 72 | 212 | 114 | 60 | 30 | 12 | 7 | 507 |
| 35-39 | 15 | 40 | 25 | 9 | 7 | 14 | 10 | 120 |
| 40-44 | 1 | 7 | 1 | 1 | 2 | 2 | 5 | 19 |
| 45-49 | | 2 | | | 1 | | 1 | 4 |
| Total | 2047 | 1654 | 555 | 170 | 51 | 34 | 25 | 4536 |

Table 11
Distribution of currently married women observed by samples according to
Age and children ever born 1997

| Age group of mother | No. of Children ever born | | | | | | | |
|---------------------|---------------------------|-------------|------------|------------|-----------|-----------|-----------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 & above | Total |
| 15-19 | 335 | 43 | 2 | | | | | 380 |
| 20-24 | 1081 | 653 | 163 | 15 | | 1 | | 1913 |
| 25-29 | 482 | 735 | 266 | 91 | 11 | 6 | 2 | 1593 |
| 30-34 | 63 | 215 | 117 | 61 | 32 | 12 | 7 | 507 |
| 35-39 | 15 | 40 | 25 | 9 | 7 | 14 | 10 | 120 |
| 40-44 | 1 | 7 | 1 | 1 | 2 | 2 | 5 | 19 |
| 45-49 | | 2 | | | 1 | | 1 | 4 |
| Total | 1977 | 1695 | 574 | 177 | 53 | 35 | 25 | 4536 |

Table 12
Distribution of currently married women observed in sample according to
Age of mother and age of last child 1997

| Age group of mother | Age of last child (in months) | | | | | | | | | |
|---------------------|-------------------------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-------------|
| | 0-14 | 15-29 | 30-44 | 45-59 | 60-74 | 75-89 | 90-104 | 105-119 | 120-134 | Total |
| 15-19 | 347 | 28 | 3 | 2 | | | | | | 380 |
| 20-24 | 1209 | 356 | 196 | 95 | 50 | 6 | 1 | | | 1913 |
| 25-29 | 572 | 304 | 248 | 201 | 179 | 41 | 29 | 10 | 9 | 1593 |
| 30-34 | 83 | 100 | 89 | 68 | 69 | 41 | 23 | 16 | 18 | 507 |
| 35-39 | 17 | 20 | 21 | 11 | 21 | 8 | 7 | 1 | 14 | 120 |
| 40-44 | 3 | 5 | 5 | 1 | | 2 | | 1 | 2 | 19 |
| 45-49 | | 1 | 1 | | | | | 1 | 1 | 4 |
| Total | 2231 | 814 | 563 | 378 | 319 | 98 | 60 | 29 | 44 | 4536 |

Table 13

Live Birth Observed in Samples Classified by Month of Occurrence

| District | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Kasargod | 12 | 21 | 19 | 23 | 31 | 17 | 36 | 18 | 31 | 25 | 21 | 23 | 277 |
| Kannur | 27 | 17 | 19 | 19 | 18 | 22 | 23 | 23 | 20 | 20 | 26 | 18 | 252 |
| Wayanad | 18 | 16 | 17 | 27 | 14 | 7 | 14 | 22 | 12 | 10 | 14 | 16 | 187 |
| Kozhikode | 17 | 19 | 22 | 35 | 36 | 28 | 32 | 28 | 23 | 24 | 30 | 21 | 315 |
| Malappuram | 99 | 65 | 97 | 106 | 109 | 87 | 114 | 99 | 81 | 92 | 83 | 92 | 1124 |
| Palakkad | 32 | 27 | 45 | 34 | 38 | 46 | 28 | 37 | 36 | 39 | 50 | 24 | 436 |
| Thrissur | 16 | 19 | 28 | 42 | 32 | 21 | 21 | 33 | 33 | 38 | 24 | 26 | 333 |
| Ernakulam | 11 | 16 | 26 | 17 | 21 | 18 | 19 | 18 | 16 | 25 | 15 | 18 | 220 |
| Idukki | 16 | 20 | 21 | 8 | 19 | 19 | 31 | 16 | 17 | 23 | 15 | 19 | 224 |
| Kottayam | 17 | 17 | 15 | 19 | 16 | 23 | 18 | 16 | 23 | 27 | 20 | 23 | 234 |
| Alappuzha | 14 | 13 | 8 | 10 | 11 | 14 | 10 | 9 | 27 | 17 | 9 | 13 | 155 |
| Pathanamthitta | 11 | 7 | 5 | 12 | 9 | 17 | 19 | 10 | 15 | 12 | 10 | 8 | 135 |
| Kollam | 18 | 22 | 24 | 13 | 27 | 14 | 23 | 30 | 22 | 35 | 24 | 22 | 274 |
| Thiruvananthapuram | 35 | 27 | 31 | 33 | 32 | 36 | 43 | 27 | 30 | 23 | 32 | 21 | 370 |
| Total | 343 | 306 | 377 | 398 | 413 | 369 | 431 | 386 | 386 | 410 | 373 | 344 | 4536 |

Table 14
Live Birth Observed in samples by type of Medical Attention

| District | Institutional | Trained Professional | Un-trained Professional | Non Professional | Not Stated | Total |
|--------------------|---------------|----------------------|-------------------------|------------------|------------|-------------|
| Kasargod | 265 | 4 | 5 | 3 | | 277 |
| Kannur | 243 | 8 | 1 | | | 252 |
| Wayanad | 185 | 1 | 1 | | | 187 |
| Kozhikode | 312 | 2 | 1 | | | 315 |
| Malappuram | 1087 | 16 | 16 | 5 | | 1124 |
| Palakkad | 427 | 3 | 5 | 1 | | 436 |
| Thrissur | 326 | 5 | 2 | | | 333 |
| Ernakulam | 218 | 2 | | | | 220 |
| Idukki | 211 | 4 | 8 | 1 | | 224 |
| Kottayam | 233 | 1 | | | | 234 |
| Alappuzha | 154 | 1 | | | | 155 |
| Pathanamthitta | 135 | | | | | 135 |
| Kollam | 272 | 1 | 1 | | | 274 |
| Thiruvananthapuram | 370 | | | | | 370 |
| Total | 4438 | 47 | 41 | 10 | | 4536 |

Table 15
% Distribution of Birth by age of mother and order of birth of child

| Age Group | Not Stated | 1 | 2 | 3 | 4 | 5 | 6 | 7 and above |
|--------------|------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|
| 15 To 19 | | 90.72 | 8.76 | 0.26 | 0.26 | | | |
| 20 To 24 | | 58.97 | 31.13 | 8.92 | 0.88 | 0.05 | 0.05 | |
| 25 To 29 | | 31.55 | 44.22 | 17.33 | 5.65 | 0.68 | 0.43 | 0.12 |
| 30 To 34 | | 13.20 | 40.97 | 22.52 | 12.43 | 6.99 | 2.52 | 1.36 |
| 35 To 39 | | 15.45 | 27.64 | 20.33 | 9.76 | 7.32 | 10.57 | 8.94 |
| 40 To 44 | | 15.79 | 26.32 | 5.26 | 10.53 | 10.53 | 15.79 | 15.79 |
| 45 and above | | | 25.00 | | | 50.00 | | 25.00 |
| Total | | 45.53 | 34.81 | 12.94 | 4.07 | 1.33 | 0.80 | 0.52 |

Table 16
% Distribution of Samples according to birthrate

| Age Group | Kasaragod | Kannur | Wayanad | Kozhi-kodu | Malappuram | Palakkad | Thrissur | Erana-kulam | Iddukki | Kottayam | Alappuzha | Pathanam-thitta | Kollam | Thiruvananthapuram | Total |
|-------------------|-----------|--------|---------|------------|------------|----------|----------|-------------|---------|----------|-----------|-----------------|--------|--------------------|-------|
| Less than 12 | | | | 1 | | 1 | | 1 | | 1 | 4 | 2 | 3 | | 13 |
| % | | | | 9.09 | | 8.67 | | 12.50 | | 11.11 | 50.00 | 33.33 | 25.00 | | |
| 12 & Less than 16 | | 3 | 1 | 2 | 1 | 2 | 6 | 2 | 1 | 2 | 3 | 3 | 5 | 2 | 33 |
| % | | 37.5 | 20.00 | 18.18 | 3.57 | 13.33 | 46.15 | 25.00 | 14.29 | 22.22 | 37.50 | 50.00 | 41.67 | 15.38 | |
| 16 & Less than 20 | 2 | 3 | 1 | 5 | 4 | 6 | 3 | 3 | 2 | 4 | 1 | 1 | 3 | 9 | 47 |
| % | 28.57 | 37.5 | 20.00 | 45.45 | 14.29 | 40.00 | 23.08 | 37.50 | 28.57 | 44.44 | 12.50 | 16.67 | 25.00 | 69.23 | |
| 20 & Less than 24 | 2 | | 1 | 3 | 7 | 2 | 4 | 2 | 2 | 2 | | | 1 | 2 | 28 |
| % | 28.57 | | 20.00 | 27.27 | 25.00 | 13.33 | 30.77 | 25.00 | 28.57 | 22.22 | | | 8.33 | 15.38 | |
| 24 & Less than 28 | 1 | 1 | 1 | | 7 | 4 | | | 2 | | | | | | 16 |
| % | 14.29 | 12.50 | 20.00 | | 25.00 | 28.67 | | | 28.57 | | | | | | |
| 28 & Less than 32 | 2 | | 1 | | 8 | | | | | | | | | | 11 |
| % | 28.57 | | 20.00 | | 28.57 | | | | | | | | | | |
| 32 & Less than 36 | | 1 | | | 1 | | | | | | | | | | 2 |
| % | | 12.50 | | | 3.57 | | | | | | | | | | |
| Total | 7 | 8 | 5 | 11 | 28 | 15 | 13 | 8 | 7 | 9 | 8 | 6 | 12 | 13 | 150 |

Table 17
Distribution of Still birth observed in samples and estimated according to sex

| District | Still Birth Observed | | | Still Birth Estimated | | | ELB+ESB | SB Rate |
|--------------------|----------------------|-----------|-----------|-----------------------|-------------|-------------|---------------|-------------|
| | Male | Female | Total | Male | Female | Total | | |
| Kasargod | 2 | 2 | 4 | 185 | 184 | 369 | 25927 | 14.27 |
| Kannur | 2 | 1 | 3 | 196 | 99 | 295 | 25033 | 11.74 |
| Wayanad | 1 | | 1 | 90 | | 90 | 17005 | 5.29 |
| Kozhikode | 3 | | 3 | 306 | | 306 | 32488 | 9.42 |
| Malappuram | 7 | 7 | 14 | 483 | 484 | 967 | 78564 | 12.30 |
| Palakkad | 1 | | 1 | 95 | | 95 | 41681 | 2.28 |
| Thrissur | | | | | | 0 | 36541 | 0.00 |
| Ernakulam | | 1 | 1 | | 128 | 128 | 28392 | 4.51 |
| Idukki | | | | | | 0 | 23218 | 0.00 |
| Kottayam | 1 | | 1 | 116 | | 116 | 27315 | 4.25 |
| Alappuzha | 1 | | 1 | 122 | | 122 | 18959 | 6.43 |
| Pathanamthitta | 1 | | 1 | 118 | | 118 | 16049 | 7.35 |
| Kollam | 1 | 1 | 2 | 113 | 112 | 225 | 30988 | 7.23 |
| Thiruvananthapuram | 1 | 1 | 2 | 104 | 104 | 208 | 38689 | 5.38 |
| Total | 21 | 13 | 34 | 1928 | 1111 | 3039 | 440849 | 6.89 |

Table 18
District wise Death Observed and Estimated

| District | Observed | | | Estimated | | |
|--------------------|------------|------------|-------------|--------------|--------------|---------------|
| | Male | Female | Total | Male | Female | Total |
| Kasargod | 38 | 32 | 70 | 3506 | 2953 | 6459 |
| Kannur | 48 | 24 | 72 | 4712 | 2356 | 7068 |
| Kozhikode | 61 | 48 | 109 | 6232 | 4904 | 11136 |
| Wayanad | 27 | 14 | 41 | 2442 | 1267 | 3709 |
| Malappuram | 121 | 86 | 207 | 8353 | 5938 | 14291 |
| Palakkad | 72 | 45 | 117 | 6867 | 4292 | 11159 |
| Thrissur | 80 | 62 | 142 | 8779 | 6803 | 15582 |
| Ernakulam | 36 | 26 | 62 | 4625 | 3340 | 7965 |
| Idukki | 49 | 33 | 82 | 5079 | 3420 | 8499 |
| Kottayam | 49 | 40 | 89 | 5696 | 4649 | 10345 |
| Alappuzha | 47 | 38 | 85 | 5712 | 4618 | 10330 |
| Pathanamthitta | 47 | 26 | 73 | 5546 | 3069 | 8615 |
| Kollam | 68 | 44 | 112 | 7635 | 4940 | 12575 |
| Thiruvananthapuram | 79 | 59 | 138 | 8216 | 6137 | 14353 |
| Total | 822 | 577 | 1399 | 83400 | 58686 | 142086 |

Table 18 A
Distribution of Death Estimated in Samples according to Age and Sex

| District | All Group | Below 1 | 1 - 4 | 5 - 9 | 10 - | 15 - | 20 - 24 | 25 - 29 | 30 - 34 | 35 - 39 | 40 - 44 | 45 - 49 | 50 - 54 | 55 - 59 | 60 - 64 | 65 - 69 | >=70 |
|------------|-----------|---------|-------|-------|------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| Kasargod | Male | 277 | 92 | 92 | 0 | 92 | 0 | 0 | 277 | 92 | 92 | 185 | 92 | 369 | 92 | 554 | 1199 |
| | Female | 369 | 185 | 0 | 0 | 185 | 0 | 0 | 185 | 0 | 0 | 92 | 0 | 0 | 185 | 646 | 1107 |
| | Total | 646 | 277 | 92 | 0 | 277 | 0 | 0 | 462 | 92 | 92 | 277 | 92 | 369 | 277 | 1200 | 2306 |
| Kannur | Male | 393 | 98 | 0 | 0 | 0 | 0 | 393 | 0 | 0 | 196 | 0 | 98 | 196 | 884 | 295 | 2160 |
| | Female | 295 | 0 | 98 | 0 | 0 | 0 | 0 | 98 | 98 | 98 | 98 | 0 | 0 | 98 | 98 | 1374 |
| | Total | 7068 | 688 | 98 | 98 | 0 | 0 | 393 | 98 | 98 | 294 | 98 | 98 | 196 | 982 | 393 | 3534 |
| Wayanad | Male | 181 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 0 | 90 | 0 | 181 | 271 | 271 | 452 | 816 |
| | Female | 1266 | 0 | 90 | 90 | 0 | 181 | 90 | 0 | 0 | 0 | 0 | 181 | 90 | 0 | 362 | 182 |
| | Total | 3709 | 181 | 90 | 90 | 0 | 181 | 90 | 181 | 0 | 90 | 0 | 362 | 361 | 271 | 814 | 998 |
| Kozhikode | Male | 409 | 0 | 0 | 0 | 102 | 204 | 306 | 0 | 102 | 306 | 306 | 817 | 409 | 511 | 409 | 2352 |
| | Female | 409 | 0 | 0 | 0 | 102 | 102 | 204 | 204 | 204 | 204 | 204 | 0 | 102 | 511 | 409 | 2248 |
| | Total | 11136 | 818 | 0 | 0 | 204 | 306 | 510 | 204 | 306 | 510 | 510 | 817 | 511 | 1022 | 818 | 4600 |
| Malappuram | Male | 759 | 207 | 0 | 69 | 69 | 138 | 207 | 207 | 207 | 207 | 207 | 621 | 414 | 1107 | 1105 | 2831 |
| | Female | 5936 | 552 | 69 | 138 | 0 | 69 | 0 | 69 | 138 | 69 | 138 | 276 | 345 | 621 | 483 | 2900 |
| | Total | 14291 | 1311 | 276 | 138 | 69 | 207 | 207 | 276 | 345 | 276 | 345 | 897 | 759 | 1728 | 1588 | 5731 |
| Palakkad | Male | 6867 | 382 | 95 | 0 | 0 | 95 | 477 | 286 | 95 | 382 | 286 | 0 | 382 | 286 | 954 | 3052 |
| | Female | 4292 | 668 | 0 | 0 | 95 | 95 | 95 | 0 | 95 | 0 | 0 | 191 | 95 | 191 | 477 | 2195 |
| | Total | 11159 | 1050 | 95 | 95 | 95 | 190 | 572 | 286 | 190 | 382 | 286 | 191 | 477 | 477 | 1431 | 5247 |
| Thrissur | Male | 8780 | 329 | 0 | 0 | 110 | 0 | 0 | 0 | 219 | 549 | 658 | 219 | 439 | 1427 | 1427 | 3403 |
| | Female | 6802 | 219 | 0 | 0 | 0 | 219 | 0 | 0 | 110 | 219 | 439 | 219 | 110 | 439 | 658 | 4170 |
| | Total | 15582 | 548 | 0 | 0 | 110 | 219 | 0 | 0 | 329 | 768 | 1097 | 438 | 549 | 1866 | 2085 | 7573 |

Contd..

Table 18 A - (Contd..)

| District | All Group | Below 1 | 1 - 4 | 5 - 9 | 10 - | 15 - | 20 - 24 | 25 - 29 | 30 - 34 | 35 - 39 | 40 - 44 | 45 - 49 | 50 - 54 | 55 - 59 | 60 - 64 | 65 - 69 | >=70 | Total |
|--------------------|-----------|---------|-------|-------|------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|
| Ernakulam | Male | 4625 | 128 | 0 | 0 | 257 | 0 | 0 | 128 | 0 | 128 | 0 | 128 | 257 | 128 | 514 | 642 | 2315 |
| | Female | 3340 | 385 | 0 | 0 | 0 | 0 | 128 | 0 | 128 | 128 | 0 | 0 | 0 | 0 | 0 | 385 | 2186 |
| | Total | 7965 | 513 | 0 | 0 | 257 | 0 | 128 | 128 | 256 | 256 | 0 | 128 | 257 | 128 | 514 | 1027 | 4501 |
| Idukki | Male | 5078 | 311 | 0 | 207 | 104 | 104 | 104 | 311 | 0 | 207 | 311 | 415 | 0 | 415 | 104 | 726 | 1759 |
| | Female | 3421 | 311 | 104 | 0 | 104 | 311 | 104 | 207 | 0 | 311 | 207 | 104 | 311 | 207 | 104 | 207 | 829 |
| | Total | 8499 | 622 | 104 | 207 | 208 | 415 | 208 | 518 | 0 | 518 | 518 | 519 | 311 | 622 | 208 | 933 | 2588 |
| Kottayam | Male | 5695 | 232 | 0 | 0 | 0 | 0 | 116 | 116 | 0 | 116 | 116 | 465 | 232 | 232 | 697 | 465 | 2908 |
| | Female | 4650 | 116 | 0 | 0 | 0 | 116 | 232 | 116 | 116 | 0 | 0 | 465 | 116 | 0 | 465 | 116 | 2792 |
| | Total | 10345 | 348 | 0 | 0 | 0 | 116 | 348 | 232 | 116 | 116 | 116 | 930 | 348 | 232 | 1162 | 581 | 5700 |
| Alappuzha | Male | 5713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 243 | 243 | 0 | 122 | 608 | 122 | 1094 | 608 | 2673 |
| | Female | 4617 | 122 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 243 | 243 | 608 | 3279 |
| | Total | 10330 | 122 | 0 | 0 | 122 | 0 | 0 | 0 | 243 | 243 | 0 | 122 | 608 | 365 | 1337 | 1216 | 5952 |
| Pathanamthitta | Male | 5547 | 236 | 0 | 0 | 0 | 0 | 354 | 0 | 118 | 0 | 118 | 472 | 118 | 118 | 118 | 472 | 1888 |
| | Female | 3068 | 236 | 0 | 0 | 0 | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 118 | 118 | 118 | 472 | 1888 |
| | Total | 8615 | 472 | 0 | 0 | 0 | 0 | 472 | 0 | 118 | 0 | 118 | 472 | 236 | 236 | 590 | 1298 | 4603 |
| Kollam | Male | 7634 | 0 | 0 | 112 | 0 | 112 | 225 | 337 | 0 | 112 | 337 | 337 | 449 | 225 | 561 | 1235 | 3592 |
| | Female | 4941 | 112 | 0 | 0 | 0 | 112 | 0 | 225 | 112 | 112 | 225 | 0 | 112 | 225 | 337 | 674 | 2695 |
| | Total | 12575 | 112 | 0 | 112 | 0 | 224 | 225 | 562 | 112 | 224 | 562 | 337 | 561 | 450 | 898 | 1909 | 6287 |
| Thiruvananthapuram | Male | 8216 | 520 | 104 | 104 | 0 | 104 | 104 | 104 | 208 | 104 | 624 | 312 | 832 | 312 | 832 | 624 | 3328 |
| | Female | 6137 | 104 | 0 | 104 | 0 | 312 | 416 | 312 | 0 | 104 | 104 | 208 | 0 | 520 | 416 | 416 | 3121 |
| | Total | 14353 | 624 | 104 | 208 | 0 | 416 | 520 | 416 | 208 | 208 | 728 | 520 | 832 | 832 | 1248 | 1040 | 6449 |
| State | Male | 83404 | 4157 | 596 | 610 | 430 | 693 | 1340 | 2379 | 1520 | 1625 | 3328 | 3893 | 4524 | 4032 | 8852 | 10322 | 35103 |
| | Female | 58682 | 3898 | 448 | 430 | 321 | 1302 | 1664 | 1249 | 912 | 1300 | 1126 | 1748 | 1524 | 2055 | 3728 | 6011 | 30966 |
| | Total | 142086 | 8055 | 1044 | 1040 | 751 | 1995 | 3004 | 3628 | 2432 | 2925 | 4454 | 5641 | 6048 | 6087 | 12580 | 16333 | 66069 |

Table 19

Age Specific Death Rate of State

| Age Group | Deaths | | | Population | | | Age Specific Death Rate | | |
|-----------|--------|--------|-------|------------|---------|---------|-------------------------|--------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Below 1 | 4157 | 3898 | 8055 | 225038 | 210508 | 435546 | 18.47 | 18.52 | 18.49 |
| 1-4 | 596 | 448 | 1044 | 869032 | 823890 | 1692922 | 0.69 | 0.54 | 0.62 |
| 5-9 | 610 | 430 | 1040 | 1093451 | 1012880 | 2106332 | 0.56 | 0.42 | 0.49 |
| 10-14 | 430 | 321 | 751 | 1234114 | 1176795 | 2410909 | 0.35 | 0.27 | 0.31 |
| 15-19 | 693 | 1302 | 1995 | 1181179 | 1239089 | 2420268 | 0.59 | 1.05 | 0.82 |
| 20-24 | 1340 | 1664 | 3004 | 1101493 | 1233181 | 2334674 | 1.22 | 1.35 | 1.29 |
| 25-29 | 2379 | 1249 | 3628 | 967266 | 1175931 | 2143197 | 2.46 | 1.06 | 1.69 |
| 30-34 | 1520 | 912 | 2432 | 862280 | 960200 | 1822481 | 1.76 | 0.95 | 1.33 |
| 35-39 | 1625 | 1300 | 2925 | 777121 | 904992 | 1682113 | 2.09 | 1.44 | 1.74 |
| 40-44 | 3328 | 1126 | 4454 | 707859 | 719781 | 1427640 | 4.70 | 1.56 | 3.12 |
| 45-49 | 3893 | 1748 | 5641 | 601303 | 601291 | 1202593 | 6.47 | 2.91 | 4.69 |
| 50-54 | 4524 | 1524 | 6048 | 445198 | 476644 | 921842 | 10.16 | 3.20 | 6.56 |
| 55-59 | 4032 | 2055 | 6087 | 386128 | 424447 | 810575 | 10.44 | 4.84 | 7.51 |
| 60-64 | 8850 | 3728 | 12578 | 355832 | 389224 | 745057 | 24.87 | 9.58 | 16.88 |
| 65-69 | 10322 | 6011 | 16333 | 273353 | 320688 | 594040 | 37.76 | 18.74 | 27.49 |
| Above 70 | 35098 | 30961 | 66059 | 369650 | 466652 | 836303 | 94.95 | 66.35 | 78.99 |

Table 20
Distribution of Death observed in Samples classified by month of Occurrence

| District | Jan | Feb | Ma | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| Kasargod | 6 | 4 | 10 | 3 | 2 | 9 | 6 | 6 | 5 | 8 | 8 | 3 | 70 |
| Kannur | 7 | 5 | 4 | 7 | 6 | 5 | 13 | 5 | 1 | 7 | 8 | 4 | 72 |
| Wayanad | 4 | 3 | 4 | 1 | 1 | 3 | 7 | 6 | 1 | 4 | 3 | 4 | 41 |
| Kozhikode | 9 | 8 | 9 | 13 | 6 | 9 | 13 | 7 | 8 | 7 | 8 | 12 | 109 |
| Malappu- ram | 14 | 22 | 16 | 12 | 21 | 19 | 25 | 14 | 16 | 17 | 19 | 12 | 207 |
| Palakkad | 8 | 10 | 5 | 14 | 10 | 10 | 13 | 6 | 9 | 9 | 11 | 12 | 117 |
| Thrissur | 11 | 13 | 11 | 9 | 10 | 11 | 24 | 11 | 12 | 6 | 12 | 12 | 142 |
| Ernakulam | 6 | 3 | 10 | 5 | 2 | 4 | 9 | 8 | 6 | 3 | 4 | 2 | 62 |
| Idukki | 9 | 6 | 5 | 4 | 5 | 4 | 22 | 11 | 4 | 4 | 1 | 7 | 82 |
| Kottayam | 5 | 8 | 14 | 6 | 7 | 4 | 10 | 10 | 11 | 4 | 7 | 3 | 89 |
| Alappuzha | 6 | 6 | 9 | 11 | 8 | 5 | 11 | 5 | 5 | 5 | 8 | 6 | 85 |
| Pathanamt hitta | 6 | 10 | 4 | 7 | 4 | 6 | 7 | 3 | 1 | 10 | 7 | 8 | 73 |
| Kollam | 6 | 8 | 5 | 8 | 7 | 14 | 11 | 12 | 12 | 13 | 5 | 11 | 112 |
| Thiruvana nthapuram | 18 | 11 | 13 | 8 | 12 | 10 | 7 | 11 | 15 | 14 | 10 | 9 | 138 |
| Total | 115 | 117 | 119 | 108 | 101 | 113 | 178 | 115 | 106 | 111 | 111 | 105 | 1399 |

Table 21
Distribution of Death observed in Samples classified by Type of Medical Attention

| District | Institutional | Qualified Medical Practitioner | Un- Qualified Medical Practitioner | Treatment No | Total |
|--------------------|---------------|--------------------------------------|---|-----------------|-------|
| Kasargod | 24 | 37 | 2 | 7 | 70 |
| Kannur | 57 | 7 | | 8 | 72 |
| Wayanad | 36 | | 1 | 4 | 41 |
| Kozhikode | 101 | 4 | | 4 | 109 |
| Malappuram | 113 | 68 | 11 | 15 | 207 |
| Palakkad | 49 | 20 | 13 | 35 | 117 |
| Thrissur | 43 | 85 | 1 | 13 | 142 |
| Ernakulam | 25 | 33 | | 4 | 62 |
| Idukki | 26 | 3 | 30 | 23 | 82 |
| Kottayam | 38 | 51 | | | 89 |
| Alappuzha | 33 | 52 | | | 85 |
| Pathanamthitta | 70 | | | 3 | 73 |
| Kollam | 85 | 20 | 1 | 6 | 112 |
| Thiruvananthapuram | 134 | 1 | | 3 | 138 |
| State | 834 | 381 | 59 | 125 | 1399 |

Table 22
Distribution of Samples according to Death Rate in samples

| Age Group | Total | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Less than 1 | 1 | | | | | 1 | | | | | | | | | |
| % | 0.67 | | | | | 3.57 | | | | | | | | | |
| 1 & L.T 3 | 10 | | | 1 | | 4 | | | 2 | | | | | 2 | 1 |
| % | 6.67 | | | 20.00 | | 14.29 | | | 25.00 | | | | | 16.67 | 7.69 |
| 3 & L.T 5 | 45 | 3 | 2 | 2 | 3 | 13 | 9 | 1 | 1 | 3 | 3 | 1 | 1 | 3 | |
| % | 30.00 | 42.86 | 25.00 | 40.00 | 27.27 | 46.43 | 60.00 | 7.69 | 12.50 | 42.86 | 33.33 | 12.50 | 16.67 | 25.00 | |
| 5 & L.T 7 | 52 | 1 | 5 | 1 | 4 | 8 | 4 | 3 | 5 | 1 | 3 | 4 | 2 | 4 | 7 |
| % | 34.67 | 14.29 | 62.50 | 20.00 | 36.36 | 28.57 | 26.67 | 23.08 | 62.50 | 14.29 | 33.33 | 50.00 | 33.33 | 33.33 | 53.85 |
| 7 & L.T 9 | 26 | 2 | 1 | 1 | 3 | 1 | 2 | 6 | | 1 | 2 | 2 | 1 | | 4 |
| % | 17.33 | 28.57 | 12.50 | 20.00 | 27.27 | 3.57 | 13.33 | 46.15 | | 14.29 | 22.22 | 25.00 | 16.67 | | 30.77 |
| 9 & L.T 11 | 11 | 1 | | | 1 | | | 3 | | | 1 | | 1 | 3 | 1 |
| % | 7.33 | 14.29 | | | 9.09 | | | 23.08 | | | 11.11 | | 16.67 | 25.00 | 7.69 |
| 11 & L.T 13 | 4 | | | | | 1 | | | | 1 | | 1 | 1 | | |
| % | 2.67 | | | | | 3.57 | | | | 14.29 | | 12.50 | 16.67 | | |
| 13 & L.T 15 | 1 | | | | | | | | | 1 | | | | | |
| % | 0.67 | | | | | | | | | 14.29 | | | | | |
| Total | 150 | 7 | 8 | 5 | 11 | 28 | 15 | 13 | 8 | 7 | 9 | 8 | 6 | 12 | 13 |

Table 23
District wise Infant Death Observed in Samples
(Estimated according to Sex and Infant Mortality Rate)

| District | InfantDeath | | Estimated InfantDeath | | Estimated Live Births | | Infant Mortality Rate | | |
|---------------|-------------|-----------|-----------------------|-------------|-----------------------|---------------|-----------------------|--------------|--------------|
| | Male | Female | Male | Female | Male | Female | Male | Female | |
| Kasargod | 3 | 4 | 277 | 369 | 13748 | 11810 | 20.15 | 31.24 | 25.28 |
| Kannur | 4 | 3 | 393 | 295 | 12369 | 12369 | 31.77 | 23.85 | 27.77 |
| Kozhikode | 4 | 4 | 409 | 409 | 17981 | 14201 | 22.75 | 28.80 | 25.39 |
| Wayanad | 2 | | 181 | 0 | 9678 | 7236 | 18.70 | 0.00 | 10.70 |
| Malappuram | 12 | 8 | 828 | 552 | 41215 | 36382 | 20.09 | 15.17 | 17.80 |
| Palakkad | 4 | 7 | 382 | 668 | 19458 | 22128 | 19.63 | 30.19 | 25.22 |
| Thrissur | 3 | 3 | 329 | 329 | 17667 | 18874 | 18.62 | 17.43 | 18.01 |
| Ernakulam | 1 | 3 | 128 | 385 | 15545 | 12719 | 8.23 | 30.27 | 18.19 |
| Idukki | 3 | 3 | 311 | 311 | 11402 | 11816 | 27.28 | 26.32 | 26.79 |
| Kottayam | 2 | 1 | 232 | 116 | 12786 | 14413 | 18.14 | 8.05 | 12.83 |
| Alappuzha | | 1 | 0 | 122 | 9479 | 9358 | 0.00 | 13.04 | 6.48 |
| Pathanamthitt | 2 | 2 | 236 | 236 | 8733 | 7199 | 27.02 | 32.78 | 29.63 |
| Kollam | | 1 | 0 | 112 | 14932 | 15831 | 0.00 | 7.07 | 3.64 |
| Thiruvananthi | 5 | 1 | 520 | 104 | 22049 | 16433 | 23.58 | 6.33 | 16.22 |
| State | 45 | 41 | 4226 | 4008 | 227042 | 210769 | 18.61 | 19.02 | 18.81 |

Table 24
No of Infant Death observed in Samples Born in Previous Year and Current Year

| District | 1996 | | | | | | 1997 | | | | | | | |
|--------------------|----------|--------|----------|--------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 7days | | <28days | | <1Year | | Total | <7days | | <28days | | <1Year | | Total |
| | Male | Female | Male | Female | Male | Female | | Male | Female | Male | Female | Male | Female | |
| Kasargod | 1 | | 1 | | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 5 |
| Kannur | | | | | | | | 2 | 1 | 2 | 2 | 2 | 3 | 5 |
| Wayanad | | | | | | | | | | | | | | |
| Kozhikode | | | 1 | | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 6 |
| Malappuram | | | | | 3 | 2 | 5 | 8 | 5 | 8 | 5 | 8 | 5 | 14 |
| Palakkad | | | | | | | | 1 | 3 | 2 | 4 | 2 | 5 | 7 |
| Thrissur | | | 1 | | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 4 |
| Ernakulam | | | | | | | | | 2 | 1 | 2 | 1 | 3 | 2 |
| Idukki | | | | | 1 | | 1 | | 2 | 1 | 2 | 1 | 3 | 4 |
| Kottayam | | | | | | | | 2 | 1 | 2 | 1 | 2 | 1 | 3 |
| Alappuzha | | | | | | | | | | | | | 1 | 1 |
| Pathanamthitta | | | | | | 1 | 1 | | 1 | 2 | 1 | 2 | 1 | 3 |
| Kollam | | | | | | | | | 1 | | 1 | | 1 | 1 |
| Thiruvananthapuram | | | | | | 1 | 2 | 2 | | 2 | | 3 | | 3 |
| State | 1 | | 3 | | 8 | 7 | 15 | 21 | 20 | 26 | 23 | 27 | 31 | 58 |

Table 25
No of Infant Death Estimated in Samples Born in Previous Year and Current Year

| District | 1996 | | | | | | 1997 | | | | | | | |
|--------------------|-------|--------|---------|--------|--------|--------|-------|--------|--------|---------|--------|--------|--------|-------|
| | 7days | | <28days | | <1Year | | Total | <7days | | <28days | | <1Year | | Total |
| | Male | Female | Male | Female | Male | Female | | Male | Female | Male | Female | Male | Female | |
| | | | | | | | | | | | | | | |
| Kasargod | 92 | | 92 | | 92 | 92 | 184 | 185 | 92 | 185 | 185 | 277 | 462 | |
| Kannur | 0 | | 0 | | 0 | 0 | 0 | 196 | 98 | 196 | 196 | 295 | 491 | |
| Wayanad | 0 | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Kozhikode | 0 | | 102 | | 102 | 102 | 204 | 306 | 306 | 306 | 306 | 306 | 612 | |
| Malappuram | 0 | | 0 | | 207 | 138 | 345 | 552 | 345 | 552 | 552 | 414 | 966 | |
| Palakkad | 0 | | 0 | | 0 | 0 | 0 | 95 | 286 | 191 | 382 | 477 | 668 | |
| Thrissur | 0 | | 110 | | 110 | 110 | 220 | 110 | 110 | 219 | 110 | 219 | 438 | |
| Ernakulam | 0 | | 0 | | 0 | 0 | 0 | 0 | 128 | 0 | 128 | 0 | 257 | |
| Idukki | 0 | | 0 | | 104 | 0 | 104 | 0 | 207 | 104 | 207 | 311 | 415 | |
| Kottayam | 0 | | 0 | | 0 | 0 | 0 | 232 | 116 | 232 | 116 | 116 | 348 | |
| Alappuzha | 0 | | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | |
| Pathanamthitta | 0 | | 0 | | 0 | 118 | 118 | 0 | 118 | 236 | 118 | 118 | 354 | |
| Kollam | 0 | | 0 | | 0 | 0 | 0 | 0 | 112 | 0 | 112 | 0 | 112 | |
| Thiruvananthapuram | 0 | | 0 | | 104 | 104 | 208 | 208 | 0 | 208 | 0 | 312 | 312 | |
| State | 92 | | 304 | | 719 | 664 | 1383 | 1885 | 1920 | 2430 | 2206 | 3024 | 5558 | |

Table 26
Distribution of Prenatal neonatal and Infant death according to sex

| District | Less than 7 days | | | Less than 28 days | | | Less than 1 year | | |
|--------------------|------------------|-------------|-------------|-------------------|-------------|-------------|------------------|-------------|-------------|
| | Male | female | Total | Male | female | Total | Male | female | Total |
| Kasargod | 277 | 92 | 369 | 277 | 184 | 461 | 277 | 369 | 646 |
| Kannur | 196 | 98 | 294 | 196 | 196 | 392 | 196 | 294 | 490 |
| Kozhikode | 306 | 306 | 612 | 408 | 306 | 714 | 408 | 408 | 816 |
| Malappuram | 552 | 345 | 897 | 552 | 345 | 897 | 759 | 552 | 1311 |
| Palakkad | 95 | 286 | 381 | 190 | 381 | 571 | 190 | 476 | 666 |
| Thrissur | 110 | 110 | 220 | 329 | 110 | 439 | 329 | 329 | 658 |
| Ernakulam | 0 | 128 | 128 | 0 | 128 | 128 | 0 | 256 | 256 |
| Idukki | 0 | 207 | 207 | 104 | 207 | 311 | 208 | 311 | 519 |
| Kottayam | 232 | 116 | 348 | 232 | 116 | 348 | 232 | 116 | 348 |
| Alappuzha | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 122 |
| Pathanamthitta | 0 | 118 | 118 | 236 | 118 | 354 | 236 | 236 | 472 |
| Kollam | 0 | 112 | 112 | 0 | 112 | 112 | 0 | 112 | 112 |
| Thiruvananthapuram | 312 | 0 | 312 | 312 | 0 | 312 | 520 | 104 | 624 |
| Total | 2080 | 1918 | 3998 | 2836 | 2203 | 5039 | 3355 | 3685 | 7040 |

Table 27.

Birth and death detected through overlapping survey and intensive enquiry classified according to place and type of Birth and death 97

| District | Birth | | | | Death | | | | |
|--------------------|------------|-----------|------------|------------|-----------|------------|-------------|------|-----------|
| | Total | Place | | kind | Total | Place | | Kind | |
| | | In | Out | | | Live birth | Still birth | | In |
| Kasaragod | 6 | 2 | 4 | 6 | 5 | | 5 | | 5 |
| Kannur | 1 | | 1 | 1 | 5 | | 5 | | 5 |
| Wayanad | 8 | 2 | 6 | 8 | | | | | |
| Kozhikode | 7 | | 7 | 7 | 6 | 1 | 5 | | 6 |
| Malappuram | 36 | 4 | 32 | 36 | 14 | 2 | 12 | | 14 |
| Palakkad | 23 | | 23 | 23 | 7 | 1 | 6 | | 7 |
| Thrissur | 11 | | 11 | 11 | 4 | | 4 | | 4 |
| Eranakulam | 8 | | 3 | 8 | 2 | | 2 | | 2 |
| Idukki | 18 | 4 | 14 | 18 | 4 | | 4 | | 4 |
| Kottayam | 2 | | 2 | 2 | 3 | | 3 | | 3 |
| Alappuzha | 12 | 2 | 10 | 12 | 1 | | 1 | | 1 |
| Pathanamthitta | 1 | | 1 | 1 | 3 | | 3 | | 3 |
| Kollam | 1 | | 1 | 1 | 1 | | 1 | | 1 |
| Thiruvananthapuram | 3 | | 3 | 3 | 3 | 1 | 2 | | 3 |
| Total | 137 | 19 | 118 | 137 | 58 | 5 | 53 | | 58 |

Table 28 A
Distribution of Birth and death recorded by enumerator and supervisor detected through
Overlapping survey and intensive enquiry 1997 - BIRTH

| Age Group | Kasaragod | Kannur | Wayanad | Kozhikkodu | Malappuram | Palakkad | Thrissur | Ernakulam | Idukki | Kottayam | Alappuzha | Pathanamthitta | Kollam | Thiruvananthapuram | Total |
|--|-----------|--------|---------|------------|------------|----------|----------|-----------|--------|----------|-----------|----------------|--------|--------------------|-------|
| Common to enumerator and supervisor | 130 | 155 | 109 | 231 | 776 | 321 | 235 | 99 | 124 | 182 | 108 | 88 | 156 | 235 | 2949 |
| Registered by enumerator | No. | 159 | 123 | 242 | 827 | 359 | 263 | 107 | 144 | 184 | 138 | 99 | 159 | 239 | 3177 |
| | % | 48.38 | 63.1 | 65.78 | 76.83 | 73.58 | 78.98 | 48.64 | 64.29 | 78.63 | 89.61 | 73.33 | 58.24 | 64.59 | 70.04 |
| Listed by supervisor | No. | 247 | 170 | 303 | 1068 | 397 | 305 | 212 | 203 | 232 | 124 | 124 | 270 | 366 | 4293 |
| | % | 98.19 | 98.01 | 90.91 | 96.19 | 95.02 | 91.06 | 91.59 | 90.63 | 99.15 | 80.52 | 91.85 | 98.9 | 98.92 | 94.64 |
| Total omitted by enumerator and supervisor | 276 | 251 | 184 | 314 | 1119 | 435 | 333 | 220 | 223 | 234 | 154 | 135 | 273 | 370 | 4521 |
| Decided by others | 1 | 1 | 3 | 1 | 5 | 1 | | | 1 | | 1 | | 1 | | 15 |
| Overlapping survey | - | | | | | | | | | | | | | | |
| Intensive enquiry | - | | | | | | | | | | | | | | |
| Total | 277 | 252 | 187 | 315 | 1124 | 436 | 333 | 220 | 224 | 234 | 155 | 135 | 274 | 370 | 4536 |

Table 28 .B
Distribution of Birth and death recorded by enumerator and supervisor detected through
Overlapping survey and intensive enquiry 1997 - DEATH

| Age Group | Kasaragod | Kannur | Wayanad | Kozhikode | Malappuram | Palakkad | Thrissur | Eranakulam | Idukki | Kotayam | Alappuzha | Pathanamthi-tta | Kollam | Thiruvanantha-puram | Total |
|--|-------------------------------------|--------|---------|-----------|------------|----------|----------|------------|--------|---------|-----------|-----------------|--------|---------------------|-------|
| | Common to enumerator and supervisor | 49 | 49 | 23 | 89 | 138 | 90 | 120 | 40 | 53 | 77 | 70 | 63 | 93 | 103 |
| Registered by enumerator | No. | 54 | 28 | 92 | 153 | 95 | 124 | 42 | 60 | 79 | 77 | 63 | 95 | 104 | 1122 |
| | % | 77.14 | 77.78 | 68.29 | 81.4 | 73.91 | 87.32 | 67.74 | 73.17 | 88.76 | 90.59 | 86.3 | 84.82 | 75.36 | 80.2 |
| Listed by supervisor | No. | 64 | 65 | 36 | 106 | 110 | 138 | 60 | 75 | 87 | 78 | 73 | 109 | 137 | 1329 |
| | % | 91.43 | 90.28 | 87.8 | 97.25 | 92.27 | 97.18 | 96.77 | 91.46 | 97.75 | 91.76 | 100.00 | 97.32 | 99.28 | 95.00 |
| Total omitted by enumerator and supervisor | 69 | 72 | 41 | 109 | 206 | 115 | 142 | 62 | 82 | 89 | 85 | 73 | 111 | 138 | 1394 |
| Decided by others | 1 | | | | 1 | 2 | | | | | | | 1 | | 5 |
| Overlapping survey | - | | | | | | | | | | | | | | |
| Intensive enquiry | - | | | | | | | | | | | | | | |
| Total | 70 | 72 | 41 | 109 | 207 | 117 | 142 | 62 | 82 | 89 | 85 | 73 | 112 | 138 | 1399 |

Table 29
Distribution of rate of marriage per thousand population and percentage distribution of
Marriage according to age and sex 1997

| Age group | Rate of marriage per 1000 population | | | | | | Percentage | | | | | |
|-----------|--------------------------------------|--------|-------------|--------|--------------|--------|----------------|--------|-------------|--------|--------------|--------|
| | First marriage | | Re marriage | | All marriage | | First marriage | | Re marriage | | All marriage | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 15-19 | 1.08 | 54.74 | 0.00 | 0.08 | 1.08 | 54.79 | 0.90 | 31.10 | 0.00 | 4.17 | 0.88 | 30.81 |
| 20-24 | 27.64 | 91.11 | 0.00 | 0.08 | 27.64 | 91.19 | 21.33 | 50.69 | 0.00 | 4.17 | 20.78 | 50.20 |
| 25-29 | 74.67 | 29.89 | 0.83 | 0.77 | 75.51 | 30.66 | 49.83 | 15.62 | 21.05 | 37.50 | 49.09 | 15.85 |
| 30-34 | 38.70 | 4.59 | 0.70 | 0.63 | 39.41 | 5.22 | 23.00 | 1.97 | 15.79 | 25.00 | 22.82 | 2.21 |
| 35-39 | 7.45 | 0.56 | 0.65 | 0.45 | 8.10 | 1.00 | 3.96 | 0.22 | 13.16 | 16.67 | 4.20 | 0.40 |
| 40-44 | 1.15 | 0.70 | 1.00 | 0.14 | 2.15 | 0.84 | 0.56 | 0.22 | 18.42 | 4.16 | 1.01 | 0.27 |
| 45-49 | 1.01 | 0.68 | 2.02 | 0.34 | 3.04 | 1.01 | 0.42 | 0.18 | 31.58 | 8.33 | 1.22 | 0.26 |
| 15-49 | 23.26 | 32.66 | 0.61 | 0.35 | 23.88 | 33.02 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Table-30
Life Tables of Males based on Age specific Death rates for the year 1997

| Age Group X to X+n | Age specific Death rate | | | Mean age specific Death rate(m_{x+1}) | Probability of person aged X Dying before age $x+1$ (q_x) | No of death (d_x) | No. Surviving to age x out of 100000 born alive (l_x) | Year of life lived between x & $x+n$ (L_x) | Year of life between x and above x (T_x) | Expectation of life in year (Ex) | Beginning Age |
|--------------------|-------------------------|-------|-------|---|---|-----------------------|---|--|--|----------------------------------|---------------|
| | 1995 | 1996 | 1997 | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| below1 | 16.61 | 17.33 | 18.47 | 0.01747 | 0.01445 | 1445 | 100000 | 98874 | 7019366 | 70.19 | 0 |
| 10+1 | 0.24 | 0.9 | 0.69 | 0.00061 | 0.00244 | 240 | 98555 | 393740 | 6920492 | 70.22 | 1 |
| 510+9 | 0.78 | 0.86 | 0.56 | 0.00073 | 0.00364 | 358 | 98315 | 490680 | 6526752 | 66.39 | 5 |
| 1010+14 | 0.19 | 0.21 | 0.35 | 0.00025 | 0.00125 | 122 | 97957 | 489480 | 6036072 | 61.62 | 10 |
| 1510+19 | 0.42 | 0.73 | 0.59 | 0.00058 | 0.00290 | 284 | 97835 | 488465 | 5546592 | 56.69 | 15 |
| 2010+24 | 0.58 | 1.93 | 1.22 | 0.00124 | 0.00618 | 6.3 | 97551 | 486248 | 5058127 | 51.85 | 20 |
| 2510+29 | 1.91 | 1.84 | 2.46 | 0.00207 | 0.01030 | 999 | 96948 | 482243 | 4571879 | 47.16 | 25 |
| 3010+34 | 1.18 | 1.85 | 1.76 | 0.00160 | 0.00797 | 765 | 95949 | 477833 | 4089636 | 42.62 | 30 |
| 3510+39 | 2.42 | 2.44 | 2.09 | 0.00232 | 0.01153 | 1097 | 95184 | 473178 | 3611803 | 37.95 | 35 |
| 4010+44 | 3.01 | 4.63 | 4.7 | 0.00411 | 0.02034 | 1914 | 94087 | 465650 | 3138625 | 33.36 | 40 |
| 4510+49 | 5.65 | 5.83 | 6.47 | 0.00598 | 0.02946 | 2715 | 92173 | 454078 | 2672975 | 29.00 | 45 |
| 5010+54 | 8.88 | 7.33 | 10.16 | 0.00879 | 0.04300 | 3847 | 89458 | 437673 | 2218897 | 24.80 | 50 |
| 5510+59 | 11.96 | 15.71 | 10.44 | 0.01270 | 0.06155 | 5269 | 85611 | 414883 | 1781224 | 20.81 | 55 |
| 6010+64 | 19.47 | 27.46 | 24.87 | 0.02393 | 0.11290 | 9071 | 80342 | 379033 | 1366341 | 17.01 | 60 |
| 6510+69 | 30.69 | 37.37 | 37.76 | 0.03527 | 0.16206 | 11550 | 71271 | 327480 | 987308 | 13.85 | 65 |
| 70 & above | 76.92 | 99.67 | 94.95 | 0.09051 | 1.00000 | 59721 | 59721 | 659828 | 659828 | 11.05 | 70 |

Table-31
Life Tables of Females based on Age specific Death rates for the year 1997

| Age Group X to X+n | Age specific Death rate | | | Mean age specific Death rate (nm _x) | Probability of person aged X Dying before age x+1 (q _x) | No of death (d _x) | No. Surviving to ages out of 100000 born alive (l _x) | Year of life lived between x&x+n(L _x) | Year of life between x and above x (T _x) | Expectation of life in year (E _x) | Beginning Age x |
|--------------------|-------------------------|-------|-------|---|---|-------------------------------|--|---|--|---|-----------------|
| | 1995 | 1996 | 1997 | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Below 1 | 14.47 | 18.46 | 18.52 | 0.01715 | 0.01760 | 1760 | 100000 | 98557 | 7711507 | 77.12 | 0 |
| 1 to 4 | 0.86 | 0.54 | 0.54 | 0.00065 | 0.00260 | 255 | 98240 | 392450 | 7612950 | 77.49 | 1 |
| 5 to 9 | 0.38 | 0.58 | 0.42 | 0.00046 | 0.00230 | 225 | 97985 | 489363 | 7220500 | 73.69 | 5 |
| 10 to 14 | 0.18 | 0.24 | 0.27 | 0.00023 | 0.00115 | 112 | 97760 | 488520 | 6731137 | 68.85 | 10 |
| 15 to 19 | 0.33 | 0.54 | 1.05 | 0.00064 | 0.00319 | 311 | 97648 | 487463 | 6242617 | 63.93 | 15 |
| 20 to 24 | 1.51 | 0.50 | 1.35 | 0.00112 | 0.00558 | 543 | 97337 | 485328 | 5755154 | 59.13 | 20 |
| 25 to 29 | 0.84 | 0.64 | 1.06 | 0.00085 | 0.00424 | 410 | 96794 | 482945 | 5269826 | 54.44 | 25 |
| 30 to 34 | 1.36 | 0.86 | 0.95 | 0.00106 | 0.00529 | 510 | 96384 | 480645 | 4786881 | 49.66 | 30 |
| 35 to 39 | 0.74 | 1.16 | 1.44 | 0.00111 | 0.00553 | 530 | 95874 | 478045 | 4306236 | 44.92 | 35 |
| 40 to 44 | 1.56 | 1.88 | 1.56 | 0.00167 | 0.00832 | 793 | 95344 | 474738 | 3828191 | 40.15 | 40 |
| 45 to 49 | 1.87 | 3.84 | 2.91 | 0.00287 | 0.01425 | 1347 | 94551 | 469388 | 3353453 | 35.47 | 45 |
| 50 to 54 | 4.21 | 3.76 | 3.2 | 0.00372 | 0.01843 | 1718 | 93204 | 461725 | 2884065 | 30.94 | 50 |
| 55 to 59 | 6.6 | 6.17 | 4.84 | 0.00587 | 0.02893 | 2647 | 91486 | 450813 | 2422340 | 26.48 | 55 |
| 60 to 64 | 9.24 | 15.58 | 9.58 | 0.01147 | 0.05575 | 4953 | 88839 | 431813 | 1971527 | 22.19 | 60 |
| 65 to 69 | 12.49 | 18.87 | 18.74 | 0.01670 | 0.08015 | 6723 | 83886 | 402623 | 1539714 | 18.35 | 65 |
| 70 & above | 64.88 | 72.35 | 66.35 | 0.06786 | 1.00000 | 77163 | 77163 | 1137091 | 1137091 | 14.74 | 70 |

Table-32

Life Tables of Persons based on Age specific Death rates for the year 1997

| Age Group X to X+n | Age specific Death rate | | | Mean age specific Death rate (mx) | Probability of person aged X Dying before age X+1 (qx) | No of death (dx) | No. Surviving to ages out of 100000 born alive (lx) | Year of life lived between x & x+n (Lx) | Year of life between x and above x (Tx) | Expectation of life in year (Ex) | Beginning Age x |
|--------------------|-------------------------|-------|-------|-----------------------------------|--|------------------|---|---|---|----------------------------------|-----------------|
| | 1995 | 1996 | 1997 | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Below 1 | 15.53 | 17.89 | 18.49 | 0.01730 | 0.01597 | 1597 | 100000 | 98721 | 7343036 | 73.43 | 0 |
| 10-14 | 0.54 | 0.73 | 0.62 | 0.00063 | 0.00252 | 248 | 98403 | 393116 | 7244315 | 73.62 | 1 |
| 15-19 | 0.59 | 0.72 | 0.49 | 0.00060 | 0.00300 | 294 | 98155 | 490040 | 6851199 | 69.80 | 5 |
| 20-24 | 0.19 | 0.23 | 0.31 | 0.00024 | 0.00120 | 117 | 97861 | 489013 | 6361159 | 65.00 | 10 |
| 25-29 | 0.37 | 0.63 | 0.82 | 0.00061 | 0.00305 | 298 | 97744 | 487975 | 5872146 | 60.08 | 15 |
| 30-34 | 1.07 | 1.17 | 1.29 | 0.00118 | 0.00588 | 573 | 97446 | 485798 | 5384171 | 55.25 | 20 |
| 35-39 | 1.32 | 1.18 | 1.69 | 0.00140 | 0.00698 | 676 | 96873 | 482675 | 4898373 | 50.56 | 25 |
| 40-44 | 1.28 | 1.34 | 1.33 | 0.00132 | 0.00658 | 633 | 96197 | 479403 | 4415698 | 45.90 | 30 |
| 45-49 | 1.52 | 1.75 | 1.74 | 0.00167 | 0.00832 | 795 | 95564 | 475833 | 3936295 | 41.19 | 35 |
| 50-54 | 2.29 | 3.26 | 3.12 | 0.00289 | 0.01435 | 1360 | 94769 | 470445 | 3460462 | 36.51 | 40 |
| 55-59 | 3.75 | 4.84 | 4.69 | 0.00443 | 0.02191 | 2047 | 93409 | 461928 | 2990017 | 32.01 | 45 |
| 60-64 | 6.5 | 5.5 | 6.56 | 0.00619 | 0.03048 | 2785 | 91362 | 449848 | 2528089 | 27.67 | 50 |
| 65-69 | 9.19 | 10.72 | 7.51 | 0.00914 | 0.04468 | 3958 | 88577 | 432990 | 2078241 | 23.46 | 55 |
| 70 & above | 14.16 | 21.25 | 16.88 | 0.01743 | 0.08351 | 7067 | 84619 | 405428 | 1645251 | 19.44 | 60 |
| | 21.01 | 27.43 | 27.49 | 0.02531 | 0.11902 | 9230 | 77552 | 364685 | 1239823 | 15.99 | 65 |
| | 70.42 | 84.8 | 78.99 | 0.07807 | 1.00000 | 68322 | 68322 | 875138 | 875138 | 12.81 | 70 |

Table-33
Number of units and population in the Universe and sample

| District | Universe | | Samples | | Percentage of sample population | Raising factor for stratum estimate of population P/P |
|--------------------|----------------------|-------------------|-----------------------|-------------------|---------------------------------|---|
| | No of Census Village | Population (1991) | No. of Units selected | Population (1991) | | |
| Kasaragod | 116 | 895282 | 7 | 9703 | 1.08 | 92.26858 |
| Kannur | 78 | 1106251 | 8 | 11269 | 1.02 | 98.16763 |
| Wayanad | 48 | 649179 | 5 | 7177 | 1.11 | 90.45270 |
| Kozhikode | 87 | 1615444 | 11 | 15812 | 0.98 | 102.16569 |
| Malappuram | 123 | 2813816 | 28 | 40759 | 1.45 | 69.03692 |
| Palakkad | 155 | 2007658 | 15 | 21049 | 1.05 | 95.38021 |
| Thrissur | 209 | 2017095 | 13 | 18382 | 0.91 | 109.73207 |
| Ernakulam | 89 | 1444059 | 8 | 11240 | 0.78 | 128.47500 |
| Idukki | 65 | 1027185 | 7 | 9910 | 0.96 | 103.65136 |
| Kottayam | 90 | 1507353 | 9 | 12968 | 0.86 | 116.23635 |
| Alappuzha | 75 | 1391607 | 8 | 11451 | 0.82 | 121.52711 |
| Pathanamthitta | 64 | 1033298 | 6 | 8756 | 0.85 | 118.01027 |
| Kollam | 92 | 1961530 | 12 | 17471 | 0.89 | 112.27348 |
| Thiruvananthapuram | 93 | 1948407 | 13 | 18734 | 0.96 | 104.00378 |
| State | 1384 | 21418224 | 150 | 214681 | 1.00 | 99.76767 |

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