GOVERNMENT OF KERALA

SAMPLE REGISTRATION KERALA RURAL

ANNUAL REPORT 1985
No. 23

DEPARTMENT OF
ECONOMICS & STATISTICS
TRIVANDRUM 1987

PRINTED BY THE S.G.P. AT THE GOVERNMENT PRESS,
ERNAKULAM—1987

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68/506—1

PREFACE

The sample registration system was introduced in all the States of India under the directions of the Registrar General of India with the objective of obtaining reliable estimates of vital rates in the country regularly.

This report presents the results of the study in rural areas of Kerala State for the year 1985. In addition to the estimates of vital rates viz.—Crude birth and death rates, infant mortality rate etc. statistics of marriages obtained through the study are also included in this report.

This report was prepared by the sample registration unit of the Directorate of Economics and Statistics.

Trivandrum,
8-7-1987.

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Director of Economics and Statistics

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SAMPLE REGISTRATION OF BIRTHS AND DEATHS IN RURAL AREAS 1985

CHAPTER 1

INTRODUCTION

Sample registration system has been recognised as a unique technique for obtaining reliable data on vital rates, in the context of deficiencies in the statutory registration system. The Department of Economics and Statistics is the agency for the study in rural areas of the State while the Census Department is for urban areas, as per the directions of the Registrar General of India. This report is based on the findings of the study in 150 samples selected in rural areas of the State for the year 1985.

The sample registration system, basically a sample survey designed to obtain reliable data on vital rates, was introduced in the State as a pilot project during 1964–65 in 20 rural and 5 urban samples. The full fledged scheme was introduced on 1st July 1965 covering 150 samples in rural areas of the State on a regular basis. Samples were selected after stratifying the census villages into four types according to the population of 1981 census viz.—below 500, 500 to 999, 1000 to 1999 and 2000 and above under the two Regions of the State. All the northern districts of the State beyond Trichur forms the northern region and the remaining districts from Trivandrum to Trichur form the southern region. The number of samples selected and the total number of villages in each stratum are given in Table 28 appended to this report.

1.2. Staff

One hundred and fifty part-time enumerators were engaged in the regular field work for registering the births and deaths occurred in each sample during each month and 14 Statistical Assistants/Computors deputed from Census Department in half yearly surveys. Additional District Officers in each district conducted reverification of the unmatched and partially matched events. At the State Headquarters the nucleus staff consisting of a Regional Statistical Officer, a Research Assistant, a Computor from Census Department and two Compilers attended to the work relating to the sample registeration system.

1.3. Field work

The details of births and deaths registered by the enumerators on a regular basis through informants and housevisits were reported to the district and State Headquarters every month. The Statistical Assistants/Computors conducted half yearly surveys independent of the

enumerators for updating the population and for collecting details of births and deaths. The data collected by both the enumerators and the Statistical Assistant/Computor Supervisors were matched at the District Headquarters and the reverification of the unmatched and partially matched events was done by the Additional District Officers concerned.

1.4. Overlapping survey

With every half yearly survey, the data relating to the previous half year were also collected in order to bring out the events missed, if any by both the enumerator and supervisor during the previous half year. By this procedure 212 births and 48 deaths were detected during the year.

1.5. Intensive enquiry

In 40 samples of the State identified as deficient units for the year, an intensive enquiry was conducted by Senior Officers of this department through which 66 births and 21 deaths were detected.

Chapter 2

POPULATION AND ITS GROWTH

The estimated population of Kerala rural was seen as 2,16,11,884 on 1st July 1985 and 2,17,79,148 on 1st January 1986 recording an increase of 0·77 per cent during the second half of 1985 as against 0·55 during the previous year. The increase in population during the period in northern region was 1·12 per cent and that in southern region was 0·52 per cent. Mid-year population increased by 1·46 per cent between 1984 and 1985.

2.2 Sex ratio and percentage distribution of population by age

The sex ratio and percentage distribution of population by age for the year 1971, 1984 and 1985 are presented in Table 4 appended. The sex ratio increased from 1050 in 1984 to 1066 during 1985. Children below the age 14 constituted 33·4 per cent of the total population during 1984 while it has come down to 33 per cent during 1985.

2.3 Religion-wise population

Percentage of population estimated for the year for Hindus, Muslims and Christians were 57·56, 21·02 and 21·42 respectively while the percentages were 57·88, 20·13 and 21·99 respectively during the previous year.

Chapter 3

MEASURES OF FERTILITY

3.1 Crude birth rate

The crude birth rate which is the most common measure of fertility, age specific fertility rate, general fertility rate, total fertility rate, gross reproduction rate and net reproduction rate for the year 1985 have been estimated and presented in this chapter.

Crude birth rate is defined as the number of live births per 1,000 of mid year population. Only the births to the usual residents in the area are taken into account for calculation of vital rates.

The crude birth rate of Kerala rural for the year 1985 was estimated as 23·2 which is 0·5 less than that of the previous year. Birth rates for rural Kerala and rural India for the years 1978 to 1985 are given in Table 3·1.

TABLE 3·1

Crude birth rate for rural Kerala and rural India 1978—1985

Year	*Rural—Kerala*			*Rural—India*
	Northern Region	*Southern Region*	*Total*	
(1)	(2)	(3)	(4)	(5)
1978	30·6	21·7	25·8	34·6
1979	31·8	22·2	26·8	34·3
1980	30·5	23·4	26·8	35·0
1981	28·0	21·5	24·7	35·5
1982	27·9	21·3	24·3	35·5
1983	29·3	19·5	23·5	35·3
1984	28·5	20·3	23·7	35·1
1985	27·2	20·4	23·2	34·0*

* Provisional

Based on the socio-economic conditions, the State was divided into two regions viz.—(1) Northern region comprising of the northern districts beyond Trichur and (2) Southern region comprising the Southern districts from Trivandrum to Trichur. Out of 150 samples selected for the study in rural areas, 61 samples are from the Northern region and 89 from the Southern region.

From Table 3·1, it can be seen that the birth rate in Northern region is always higher than that of the Southern region. This is due to the social conditions such as low age at marriage of females, reluctant altitude towards family welfare activities, low literacy etc. prevalent among the majority of the residents in Northern region.

3.2 Birth rates of neighbouring States

Comparing the birth rates of rural areas in the neighbouring States, it can be seen that Karnataka records highest birth rate i.e. 36·1 during the year 1985 and Andhra Predesh having birth rate 29·2 stands second. As in previous years Kerala keeps the lowest birth rate.

The combined birth rates for rural and urban areas together estimated provisionally for the year 1985 by the Registrar General of India in respect of the neighbouring States and India are given in Table 3·2.

TABLE 3·2

Combined birth rates in rural and urban areas of neighbouring States

States	*Combined birth rate (Rural and Urban)*
1. Andhra Pradesh	29·3
2. Karnataka	29·0
3. Tamilnadu	24·8
4. Kerala	22·9
All India	32·7

3.3 Birth rates by religion

The birth rates among the major religious groups viz.—Hindus Muslims and Christians in the State for the year separately for the two regions are given in Table 7 appended.

Comparing the birth rates among the three religions in the State, Muslims recorded the highest birth rate 31·6, Christians recorded the lowest birth rate 20·2 and Hindus 21·3.

The Muslims in Northern region who form 34·2 per cent of the total population in the area, and 67·7 per cent of the total muslim population in the State are having the highest birth rate viz.—34·3 as against 38·0 during the previous year. The lowest birth rate is recorded by Hindus in the Southern region viz.—19·6 who constitutes 57·2 per cent of the total population in the area and 57·9 per cent of the total Hindu population in the State. During the previous year the lowest birth rate was recorded by the Christian population in the Southern region. The birth rate of Christians during the year was estimated as 19·8 very near to that of Hindus in the area.

3.4 Distribution of sample villages under different birth rates

The distribution of sample villages by crude birth rates for the year 1985 and the previous two years are given in Table 12 appended. Comparing the birth rates in different sample villages with that of the State's rate, it is seen that 24 samples (39·4 per cent) in Northern region and 68 samples (76·4 per cent) in Southern region were having birth rate less than 24. The State rate 23·2 falls in the group 20 and less than 24 during the year 1985 also as in the previous year. There are 2 samples having birth rate above 44 in the Northern region and only one sample having birth rate above 32 in the Southern region. The number of samples having birth rate below 16 is one in Northern region whereas it is 14 in Southern region.

3.5 Age specific fertility rate

Age specific fertility rate can be defined as the number of live births in an year to 1,000 women of specific age group. Age specific fertility rates for different age groups are given in Table 8 appended. For comparison of rates, the age specific fertility rate for the years 1978 to 1985 are given in Table 3·2.

TABLE 3.2

Age specific fertility rate in rural Kerala 1978 to 1985

Age group/ years	1978	1979	1980	1981	1982	1983	1984	1985
1	2	3	4	5	6	7	8	9
15 to 19	43.6	48.5	47.0	39.3	31.8	34.9	34.5	33.7
20–24	183.2	184.8	197.2	175.9	176.5	172.7	179.2	177.0
25–29	169.1	181.4	184.3	166.2	168.0	161.0	168.0	155.4
30–34	112.7	121.5	105.8	98.6	95.4	87.5	74.6	73.0
35–39	71.4	65.1	59.5	53.9	53.8	42.5	35.8	29.6
40–44	22.6	19.4	15.9	19.4	18.1	13.6	14.1	14.2
45–49	3.7	5.5	3.6	4.9	3.8	3.1	4.0	1.8

3.6 General fertility rate G.F.R.

General fertility rate is the number of live births in an year to 1000 women in the reproductive age group 15–49. Region-wise general fertility rate are given below:

Northern region	..	102·08
Southern region	..	72·44
State	..	84·38

The general fertility rate for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
G.F.R.	97.7	101.3	101.1	92.2	90.8	87.1	87.5	84.4

3.7 Total fertility rate (T.F.R.)

Total fertility rate denotes the average number of children that would be born to a woman during her life time, if she was to pass through her child bearing years conforming to the age specific fertility rates of the year. The total fertility rate during the year 1985 in northern region, southern region and State were 2.98, 2.03 and 2.42 respectively while the figures for 1984 were 3.2, 2.1 and 2.6 respectively. Total fertility rate for rural Kerala during the year 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
T.F.R.	3.0	3.1	3.1	2.8	2.7	2.6	2.6	2.4

3.8 Gross reproduction rate (G.R.R.)

Gross reproduction rate is the average number of female children that would be born to a woman during her life time, if she was to pass through her child bearing years conforming to the age specific fertility rates of the year. The gross reproduction rate for the year was calculated as 1.2. The gross reproduction rate for rural Kerala for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
G.R.R.	1.5	1.5	1.5	1.3	1.3	1.2	1.3	1.2

3.9 Net reproduction rate (N.R.R.)

Net reproduction rate is the average number of female children that would be born to a woman during her life time conforming to the age specific fertility rates and mortality condition in the year. It is obtained by multiplying the age specific female birth rates of the child bearing age groups by corresponding proportion of survivors, as per life table for females (Lx/lx) and then repeating the process as in gross reproduction rate. Net reproduction rate for the year 1985 is 1.20 as against 1·26 during the previous year. Net reproduction rate for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
N.R.R.	1.33	1.37	1.34	1.21	1.22	1.15	1.26	1.20

3.10 Still birth rate

Still birth rate is the number of still births to 1000 births (both live births and still births). The still birth rate for the year was seen as 13.3 for rural Kerala. Still birth rates for northern region and southern region for the year 1985 were 16.3 and 10.4 respectively whereas the figures were 13.3 and 7.8 respectively for the year 1984. Still birth rates for males and females were estimated as 17.5 and 9.0 respectively whereas the rates were 10.8 and 10.4 during the previous year. The still birth rates for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
S.B.R.	23.7	20.5	18.3	20.8	12.6	13.5	10.5	13.3

3.11 Comparison between the vital rates under sample registration system and civil registration system

Civil registration system is a statutory system to record all the events of births and deaths. But the study on the comparison of vital rates under sample registration system and civil registration system reveals that the performance of civil registration system has to improve to a great extent. The birth rates and still birth rates obtain from civil registration system and sample registration system for the years 1978 to 1985 are given in Table 3.3 below.

TABLE 3.3

Vital rates under civil registration system and sample registration system—Kerala—Rural 1978 to 1985

Year	*Birth rate*		*Still birth rate*	
	Civil registration	*Sample registration*	*Civil registration*	*Sample registration*
1978	16.1	25.8	6.1	23.7
1979	16.3	26.8	6.1	20.5
1980	15.7	26.8	5.4	18.3
1981	15.9	24.7	5.1	20.8
1982	15.4	24.3	5.1	12.6
1983	14.9*	23.5	4.5*	13.5
1984	14.2*	23.7	5.6*	10.5
1985	13.6*	23.2	N.A.	13.3

*Provisional

3.12 Order of birth

The percentage distribution of birth by age of mother and order of birth of child is given in Table 11 appended. 85.85 per cent of the births came under first three orders of birth, while the figure for 1984 was 83.28 per cent. The birth under seventh order and above during the year was 2·48 per cent as against 2.89 per cent during the previous year.

3.13 Medical attendance at birth

The percentage distribution of birth by types of medical attention received during the year 1978 to 1985 are given in Table 3.4 below:

TABLE 3.4

Percentage distribution of birth by medical attention for the years 1978 to 1985

Year	Institutional	Trained professional	Untrained professional	Non-professional	Not stated
1	2	3	4	5	6
1978	40.8	16.4	40.6	2.2	..
1979	45.4	27.5	25.9	1.2	..
1980	46.6	24.4	28.2	0.7	0.1
1981	47.8	26.7	23.6	1.7	0.2
1982	59.1	21.8	18.2	0.9	..
1983	68.9	16.1	13.1	1.9	..
1984	73.3	9.2	13.6	3.7	0.2
1985	76.5	8.2	12.8	2.2	0.3

More and more people were seen utilising the institutional facilities provided for maternal and child health year by year. It is seen that institutional medical attention received in northern and southern regions are 60.4 per cent and 92·3 per cent respectively where as the services of untrained professionals are 23.4 per cent and 2.3 per cent respectively.

3.14 Sex ratio at birth

Sex ratio at birth is the number of males born to 100 females. Sex ratio at birth for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
Sex ratio	104.9	104.4	107.4	108.8	107.2	108.7	100.8	100.2

Sex ratio at birth in northern region and southern region were 92.5 and 108.5 respectively as against 107.2 and 97.0 respectively during the previous year.

3.15 Child woman ratio (C.W.R.)

Child woman ratio is defined as the estimated number of children in the age group 0–4 years per 1000 women in the reproductive age group 15-49.

Estimated number of children in the age group 0–4 years is 2240507.

Estimated number of women in the age group 15 to 49 is 5948808. The child woman ratio for the years 1978 to 1985 are given below:

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
C.W.R.	441	451	466	441	401	400	390	377

There is a declining trend in the child woman ratio.

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

The rate of marriages and remarriages per 1000 population and percentage distribution of marriages according to age and sex are given in Table 24 appended. The highest rate of first marriage to 1000 female population during the year was 66.6 in the age group 20–24 as against 61.6 in the same age group during the previous year. In the case of males the highest rate 68.8 was in the age group 25–29 as against 66.6 in the same age group during the previous year. The rate of marriage of females in the age group 15–19 was seen increased by 1.9 over the previous year. Of the total marriages 4.1 per cent were remarriages during the year while it was 4.6 per cent during the previous year. The mean age at marriage for males and females were seen as 26.8 and 21.6 respectively.

CHAPTER 4

MORTALITY MEASURES

4.1 Crude death rate

The crude death rate is defined as the number of death per 1000 of mid-year population. As in the case of births, the deaths occurred to usually resident members only were taken into account for calculating the death rate. The crude death rate for the year in rural Kerala was 6.6 as against 6.4 during 1984. The death rate in northern region was 6.8 and in southern region 6.4. The crude death rates for rural Kerala and rural India for the years 1978 to 1985 are given in Table 4.1 below:

TABLE 4.1

Crude death rate in Kerala Rural and All India Rural for 1978 to 1985

Years	*Kerala rural*			*All India rural*
	Northern region	*Southern region*	*Combined*	
1978	8.4	6.2	7.2	15.3
1979	8.6	5.8	7.2	13.9
1980	7.5	6.7	7.1	13.7
1981	6.9	6.1	6.5	13.6
1982	6.3	5.6	5.9	13.1
1983	7.2	6.2	6.6	13.1
1984	6.9	6.0	6.4	13.7
1985	6.8	6.4	6.6	12.9*

*Provisional

4.2 Death rates of neighbouring States

The death rates in the rural areas and the rural and urban areas combined estimated provisionally by the Registrar General of India in respect of the neighbouring States are given below in Table 4.2.

TABLE 4.2

Death rates of rural and rural and urban combined of neighbouring States

States		*Rural*	*Rural and urban combined*
Andhra Pradesh	..	10.9	10.1
Karnataka	..	9.6	8.6
Tamilnadu	..	10.9	9.5
Kerala	..	6.6	6.4
All India	..	12.9	11.7

In rural areas Andhra Pradesh and Tamilnadu recorded the highest death rate viz.—10·9. While Kerala recorded the lowest viz:–6·6 during the year. When compared the death rates in rural and urban together Andhra Pradesh recorded the highest death rate and Kerala the lowest.

4.3 Death rates among religions

The death rates among Hindus, Muslims and Christians for the year are given in Table 7 appended. As in the previous year the highest death rate 7·7 was among Hindus in northern region and the lowest death rate 4·9 was among Christians in the same region. At State level, the highest death rate 7.2 was among Hindus and the lowest 5·5 was among Muslims. The death rate among Christians has been increased to 5.8 this year as against the lowest 5.4 during the previous year.

4.4 Distribution of samples according to death rate of each sample

The distribution of samples according to death rates for the year 1985 and for the previous two years are given in Table 19 appended. During the year under report 36 samples forming 59.1 per cent of northern region and 59 samples forming 66.4 per cent of the southern region recorded the death rates less than 7 as against 63.5 per cent and 68.6 per cent respectively of the previous year. At the State level, 95 samples forming 63.3 per cent were having death rates less than 7. The number of samples recorded death rates 11 and above was found as 10 during the year which is 6.7 per cent of the total samples as against 6 samples forming 4.1 per cent during the previous year.

4.5 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. The age specific death rates are given in Table 15 appended. As usual, the age specific death rates were highest in the age group 70 and above and lowest in the age group 10 to 14 during 1985 also. The difference between the age specific death rates of Males and Females in the age group 70 and above was 7.3 during the year, while it was 22.9 during the previous year. The death rate for males was 7.7 and females 5.5 during the year.

4.6 Infant mortality rate

Infant mortality rate is the estimated number of deaths of infant is below one year of age out of 1000 live births in an year. The estimated number of infant deaths and the infant mortality rate in Kerala rural are given in Table 18 appended. The infant mortality rate for Kerala rural for the years 1978 to 1985 are given below.

	(1978)	(1979)	(1980)	(1981)	(1982)	(1983)	(1984)	(1985)
infant mortality rate ..	44·8	48·6	42·5	40·4	30·3	38·9	30·1	33·0

Infant mortality rates in northern region and southern region during the year were 43.8 and 22.8 respectively as against 35.3 and 25.0 respectively during the previous year.

4.7 Neo-natal death rate

Neo-natal death rate can be defined as the number of deaths of children below 28 days of age per 1000 live births in an year. The infant mortality has been distributed according to the period within which the infant died before completing one year of age, such as less than 7 days, 7 to 27 days and 28 days and above. The same is given in Table 4.3 below:

TABLE 4·3

Infant death rates in different periods within which the infant died

Region	*Less than 7 days*	*7 to 27 days*	*Less than 28 days*	*28 days and above*	*Total*
	(1)	(2)	(3)	(4)	(5)
Northern region ..	24·67	9·17	33·84	10·22	43·81
Southern region ..	14·48	3·10	17·58	5·17	22·78
State ..	19·52	6·10	25·62	7·67	33·03

Neo-natal death rate for the year in respect of northern region, southern region and State were 33.8, 17.6 and 25.6 respectively as against 25.2, 17.2 and 21.1 respectively during the previous year.

4.4 Comparison of mortality rates under civil registration system and sample registration system

Death rates and infant mortality rates under civil registration system and sample registration system in respect of Kerala rural for the years 1978 to 1985 are given in Table 4.4 below.

TABLE 4.4

Mortality rates under civil registration system and sample registration system for the years 1978–85

Year	*Death rates*		*Infant mortality rate*	
	Civil registration	*Sample registration*	*Civil registration*	*Sample registration*
1978	4·1	7·2	13·2	44·8
1979	4·1	7·2	11·4	48·6
1980	4·0	7·1	11·7	42·5
1981	4·0	6·5	12·2	40·4
1982	3·7	5·9	10·9	30·3
1983	3·8*	6·6	8·2*	38·9
1984	3·7*	6·4	8·7*	30·1
1985	3·7*	6·6	N.A.	33·0

* Provisional

The table above shows how the civil registration system fails to serve its moto and to what extent its activities should be improved.

4.5 Medical attendance at death

The percentage distribution of deaths according to type of medical attention received during the years 1978 to 1985 is given in Table 4.5 below:

TABLE 4.5

Percentage distribution of deaths according to type of medical attendance for the years 1978 to 1985

Year	*Institutional*	*Qualified medical practitioner*	*Unqualified medical practitioner*	*None*
1978	22	34	24	20
1979	30	34	11	25
1980	32	30	18	20
1981	41	31	12	16
1982	44	31	10	15
1983	46	26	13	15
1984	46	24	8	22
1985	49	23	11	17

From the above table, it can be seen that the number of persons who received institutional medical facilities before death have been increased year by year.

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

Life tables have been constructed based on the age specific death rates for the years 1983, 1984 and 1985 and are appended as Tables 25, 26 nd 27 of this report. The expectation of life at birth for the year for males, females and males and females together were calculated as 65.7, 72.5 and 68.9 respectively as against 66.5, 73.4 and 69.7 respectively during the previous year. The expectation of life for the last five years are given in Table 4.6 below:

TABLE 4.6

Expectation of life

Based on age specific death rate for the years	*Males*	*Females*	*Males and Females*
(1)	(2)	(3)	(4)
1979, 1980 and 1981	64·7	69.0	66.8
1980, 1981 ,, 1982	66.4	70.7	68.5
1981, 1982 ,, 1983	66.0	71.8	68.8
1982, 1983 ,, 1984	66.5	73.4	69.7
1983, 1984 ,, 1985	65.7	72.5	68.9

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28 Number of units and population in the universe and in samples.

TABLE I

Mid-year estimated population, births, deaths and vital rates—1985

Stratum	Estimated population, births and deaths					Vital rates			
	Population	Births	Deaths	Still births	Infant deaths	Birth rate	Death rate	Still birth rate	Infant death rate
1	2	3	4	5	6	7	8	9	10
I A	34619	857	202	101	50	24·73	5·83	105·43	58·34
B	172473	4345	1894	203	222	25·19	10·98	44·64	51·09
C	839655	23865	4171	679	582	28·42	4·97	27·66	24·39
D	7958328	215630	54864	3062	9867	27·09	6·89	14·00	45·76
Northern region	9005075	244697	61131	4045	10721	27·17	6·79	16·26	43·81
II A	87626	1582	365	..	..	18·04	4·17	..	..
B	326590	5780	2890	..	170	17·70	8·85	..	29·41
C	1381331	27907	8481	182	547	20·20	6·14	6·48	19·60
D	10811262	222026	68953	2528	5143	20·54	6·38	11·26	23·16
Southern region	12606809	257295	80689	2710	5860	20·41	6·40	10·42	22·78
State	21611884	501992	141820	6755	16581	23·23	6·56	13·28	33·03

TABLE 2

Sample population and estimated population for each stratum

Stratum		Observed population in samples in each stratum		Estimated population for each stratum	
		1-7-1985	1-1-1986	1-7-1985	1-1-1986
1		2	3	4	5
I	A	687	689	34619	34720
	B	1548	1531	172473	170579
	C	8655	8747	839655	848581
	D	93560	94667	7958328	8052491
Northern region		104450	105634	9005075	9106371
II	A	720	727	87626	88478
	B	1921	1942	326590	330160
	C	15146	15233	1381331	1389266
	D	124023	124638	10811262	10864873
Southern region		141810	142540	12606809	12672777
State		246260	248174	21611884	21779148

TABLE 3

Mid-year sample population and estimated population according to age and sex

Age	Observed population			Estimated population		
	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7
0–1	2772	2703	5475	242879	236106	478985
1–4	10060	10069	20129	879419	882103	1761522
5–9	14121	13593	27714	1235408	1191163	2426571
10–14	14176	13985	28161	1243956	1225350	2469306
15–19	14038	14842	28880	1232475	1302459	2534934
20–24	12060	14121	26181	1059473	1239595	2299068
25–29	9879	11496	21375	867655	1008310	1875965
30–34	8160	8749	16909	715160	767183	1482343
35–39	6591	7261	13852	577800	637305	1215105
40–44	5328	5860	11188	468500	514766	983266
45–49	5022	5449	10471	440700	479190	919890
50–54	4495	5042	9537	395738	443352	839090
55–59	3739	3925	7664	329043	345638	674681
60–64	3154	3502	6656	276808	308236	585044
65–69	2461	2745	5206	217441	242942	460383
70+	3132	3730	6862	277036	328695	605731
Total	119188	127072	246260	10459491	11152393	21611884

TABLE 4

Sex ratio and percentage distribution of population by age group (year 1971, 1984 and 1985)

Age group	1971		1984		1985	
	Sex ratio	Percentage population	Sex ratio	Percentage population	Sex ratio	Percentage population
1	2	3	4	5	6	7
0–4	980	13·5	990	10·5	996	10·4
5–9	974	13.6	959	11·2	964	11·2
10–14	983	13·5	973	11·7	985	11·4
(0–14)	(976)	(40·6)	(974)	(33·4)	(981)	(33·0)
15–19	1078	10·9	1054	11·8	1057	11·7
20–24	1046	9·2	1138	10·5	1170	10·6
25–29	1103	6·4	1126	8·5	1162	8·7
30–34	1080	5·6	1044	6·7	1073	6·9
35–39	1080	6·0	1100	5·6	1103	5·6
40–44	1005	4·6	1059	4·5	1099	4·6
45–49	941	4·5	1096	4·3	1087	4·3
50–54	969	3·2	1081	3·8	1120	3·9
55–59	982	2·7	1024	3·1	1050	3·1
60–64	1044	2·3	1067	2·7	1114	2·7
65–69	1086	1·6	1118	2·2	1117	2·1
70 & above	1116	2·4	1180	2·9	1187	2·8
All	1020	100·0	1050	100·0	1066	100·0

TABLE 5

Religion-wise sample population and estimated population for each stratum

Stratum	Observed population				Estimated population			
	Hindu	Muslim	Christian	Total	Hindu	Muslim	Christian	Total
1	2	3	4	5	6	7	8	9
I A ..	376	130	181	687	18947	6551	9121	34619
B ..	1117	426	5	1548	124452	47464	557	172473
C ..	4044	4542	69	8655	392324	440637	6694	839655
D ..	55216	30342	8002	93560	4696741	2580927	680660	7958328
Northern region ..	60753	35440	8257	104450	5232464	3075579	697032	9005075
II A ..	87	11	622	720	10588	1339	75699	87626
B ..	1059	..	862	1921	180041	..	146549	326590
C ..	7630	2074	5442	15146	695864	189151	496316	1381331
D ..	72528	14635	36860	124023	6322369	1275754	3213139	10811262
Southern region ..	81304	16720	43786	141810	7208862	1466244	3931703	12606809
State ..	142057	52160	52043	246260	12441326	4541823	4628735	21611884

TABLE 6

Stratum-wise live births observed in samples and estimated according to sex

Stratum	Observed in samples			Estimated		
	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7
I A ..	6	11	17	303	554	857
B ..	16	23	39	1782	2563	4345
C ..	126	120	246	12223	11642	23865
D .	1215	1320	2535	103349	112281	215630
Northern region ..	1363	1474	2837	117657	127040	244697
II A ..	9	4	13	1096	486	1582
B ..	22	12	34	3740	2040	5780
C ..	163	143	306	14865	13042	27907
D ..	1315	1232	2547	114631	107395	222026
Southern region ..	1509	1391	2900	134332	122963	257295
State ..	2872	2865	5737	251989	250003	501992

TABLE 7

Religion-wise Birth and Death rates

Religion	Birth rates			Death rates		
	Northern Region	Southern Region	State	Northern Region	Southern Region	State
1	2	3	4	5	6	7
Hindus ..	23·67	19·60	21·31	7·65	6·92	7·22
Muslims ..	34·30	25·90	31·59	5·76	4·89	5·48
Christians ..	22·08	19·84	20·17	4·86	6·02	5·84
Total ..	27·17	20·41	23·23	6·79	6·40	6·56

TABLE 8

Age specific fertility rate for 1985

Region	No. of women estimated in the age group of							
	15–19	20–24	25–29	30–34	35–39	40–44	45–49	Total
1	2	3	4	5	6	7	8	9
Northern Region ..	532676	489535	398044	311852	263517	213079	188271	2396974
Southern Region ..	769783	750060	610266	455331	373788	301687	290919	3551834
State ..	1302459	1239595	1008310	767183	637305	514766	479190	5948808
	No. of Births estimated							
Northern Region ..	31537	101536	64102	29533	12813	4665	511	244697
Southern Region ..	12339	117891	92573	26443	6039	1662	348	257295
State (All births) ..	43876	219427	156675	55976	18852	6327	859	501992
State (Female births) ..	22499	107717	79191	28360	8346	3203	684	250000
	Age specific fertility rate							
Northern Region ..	59·20	207·41	161·04	94·70	48·62	21·89	2·71	..
Southern Region ..	16·03	157·17	151·69	58·07	16·16	5·51	1·20	..
State (All births) ..	33·69	177·02	155·38	72·96	29·58	12·29	1·79	..
State (Female births) ..	17·27	86·90	78·54	36·97	13·10	6·22	1·43	..

TABLE 9

Live births observed in samples classified by month of occurrence

Stratum/Region / State	Number of live births reported from samples												
	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I A ..	..	..	3	3	..	3	2	1	1	..	1	3	17
B ..	..	6	5	3	4	4	2	3	1	3	5	3	39
C ..	20	19	27	13	15	24	21	15	30	16	24	22	246
D ..	213	225	215	217	228	211	248	196	166	192	229	195	2535
Northern Region ..	233	250	250	236	247	242	273	215	198	211	259	223	2837
II A ..	..	1	2	..	..	1	1	1		2	5	..	13
B ..	4	3	1	4	6	2	..	2	5	4	2	1	34
C ..	25	30	23	25	19	20	19	21	20	38	36	30	306
D ..	218	188	226	207	208	210	210	221	201	224	232	202	2547
Southern Region ..	247	222	252	236	233	233	230	245	226	268	275	233	2900
Kerala ..	480	472	502	472	480	475	503	460	424	479	534	456	5737

TABLE 10

Livebirths observed in samples by type of medical attention at delivery

Stratum	Type of medical attention					
	Institutional	Trained professionals	Untrained professionals	Non-professional	Not stated	Total
1	2	3	4	5	6	7
I A	17	..	.	.	..	17
B	15	14	8	2		39
C	153	40	36	17	..	246
D	1529	290	621	78	17	2535
Northern Region	1714	344	665	97	17	2837
II A	13	.	..	..	..	13
B	34	..	..	..	..	34
C	270	31	3	2	..	306
D	2359	94	65	26	3	2547
Southern Region	2676	125	68	28	3	2900
State	4390	469	733	125	20	5737

TABLE 11

Percentage distribution of births by age of mother and order of birth of child

Age group	1	2	3	4	5	6	7	8	9	10	Total
1	2	3	4	5	6	7	8	9	10	11	12
15–19	89·70	10·09	0·21	.	..	..	..	..	..	..	100·00
20–24	56·72	30·10	11·47	1·54	0·09	0·04	0·04	..	..	..	100·00
25–29	22·25	35·57	27·83	8·88	3·87	1·08	0·46	0·06	..	..	100·00
30–34	9·12	23·05	23·38	16·09	14·93	7·96	2·98	1.66	0·50	0·33	100·00
35–39	5·58	11·17	13·77	17·71	15·74	11·68	12·18	4·06	4·57	3·54	100·00
40–44	1·37	4·11	5·48	4·11	6·85	21·92	23·29	19·17	6·85	6·85	100·00
45–49	..	..	..	10·00	10·00	50·00	..	..	..	30·00	100·00
All	40·54	28·25	17·06	6·02	3·61	2·04	1·25	0·61	0·31	0·31	100·00

TABLE 12

Distribution of samples according to birth rate of each sample

Birth rate	Northern region		Southern region		State					
					1985		1984		1983	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1	2	3	4	5	6	7	8	9	10	11
Less than 16 ..	1	1·6	14	15·7	15	10·0	17	11·3	23	15·3
16 and less tban 20 ..	6	9·9	32	36·0	38	25·3	36	24·0	37	24·7
20 and less than 24 ..	17	27·9	22	24·7	39	26·0	36	24·0	30	20.0
24 and less than 28 ..	15	24·6	16	18·0	31	20·7	29	19·4	25	16·7
28 and less than 32 ..	6	9·8	4	4·5	10	6·7	13	8.7	14	9·3
32 and less than 36 ..	6	9·8	..	..	6	4·0	5	3·3	8	5·3
36 and less than 40 ..	7	11·5	1	1·1	8	5·3	8	5·3	6	4·0
40 and less than 44 ..	1	1·6	..	..	1	0·7	4	2·7	4	2·7
44 and above ..	2	3·3	..	..	2	1·3	2	1·3	3	2·0
Total	61	100·00	89	100·0	150	100·00	150	100·0	150	100·0

TABLE 13

Stratum–wise deaths observed in samples and estimated according to sex

Stratum	Deaths observed in samples			Estimated number of deaths		
	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7
I A	2	2	4	101	101	202
B	10	7	17	1114	780	1894
C	23	20	43	2231	1940	4171
D	363	282	645	30877	23987	54864
Northern region	398	311	709	34323	26808	61131
II A	1	2	3	122	243	365
B	13	4	17	2210	680	2890
C	57	36	93	5198	3283	8481
D	443	348	791	38617	30336	68953
Southern region	514	390	904	46147	34542	80639
State	912	701	1613	80470	61350	141820

TABLE 14

Distribution of deaths observed in samples according to age and sex

Age	Northern region			Southern region			State		
	M	F	Total	M	F	Total	M	F	Total
1	2	3	4	5	6	7	8	9	10
0 to 1	64	61	125	38	28	66	102	89	191
1 to 4	30	24	54	20	16	36	50	40	90
5 to 9	9	9	18	6	4	10	15	13	28
10 to 14	5	5	10	2	3	5	7	8	15
15 to 19	6	..	6	7	6	13	15	6	19
20 to 24	6	6	12	17	8	25	23	14	37
25 to 29	6	5	11	15	7	22	21	12	33
30 to 34	11	6	17	16	7	23	27	13	40
35 to 39	11	5	16	10	3	13	21	8	29
40 to 44	16	1	17	20	7	27	36	8	44
45 to 49	16	5	21	16	10	26	32	15	47
50 to 54	23	10	33	26	8	34	49	18	67
55 to 59	24	10	34	28	13	41	52	23	75
60 to 64	30	23	53	51	27	78	81	50	131
65 to 69	48	30	78	44	33	77	92	63	155
70 and above	93	111	204	198	210	408	291	321	612
All ages	398	311	709	514	390	904	912	701	1613

TABLE 15

Age specific death rates based on estimated values 1985

Age group	Northern region	Southern region	State		
			Total	Males	Females
1	2	3	4	5	6
Less than 1	47·20	23·27	34·62	36·67	32·51
1–4	5·42	3·60	4·49	5·00	3·98
5–9	1·32	0·76	1·03	1·11	0·94
10–14	0·80	0·31	0·53	0·49	0·56
15–19	0·52	0·76	0·66	0·93	0·40
20–24	1·12	1·57	1·39	1·88	0·98
25–29	1·28	1·68	1·52	2·10	1·03
30–34	2·47	2·27	2·35	3·29	1·47
35–39	2·79	1·58	2·07	3·13	1·12
40–44	3·64	4·06	3·89	6·67	1·36
45–49	5·07	4·26	4·58	6·61	2·71
50–54	8·79	5·78	6·95	10·69	3·61
55–59	11·98	8·52	9·77	13·97	5·77
60–64	21·19	18·93	19·77	26·07	14·12
65–69	40·42	23·16	29·44	37·13	22·57
70 and above	92·82	88·03	89·52	93·51	86·16
All ages	6·79	6·40	6·56	7·69	5·50

TABLE 16

Deaths observed in samples classified by month of occurrence

Stratum	January	February	March	April	May	June	July	August	September	October	November	December	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I A	..	..	..	..	..	..	2	..	1	..	..	1	4
B	2	1	..	1	2	..	4	2	..	2	2	1	17
C	4	1	3	2	4	5	5	6	4	2	4	3	43
D	44	52	64	48	51	56	64	71	53	44	53	45	645
Northern region	50	54	67	51	57	61	75	79	58	48	59	50	709
II A	1	..	..	..	..	..	1	..	..	..	1	..	3
B	1	2	..	2	..	4	3	4	1	..	..	..	17
C	5	7	7	5	2	7	12	12	6	14	6	10	93
D	49	66	60	63	53	69	71	84	59	73	68	76	791
Southern region	56	75	67	70	55	80	87	100	66	87	75	86	904
State	106	129	134	121	112	141	162	179	124	135	134	136	1613

TABLE 17

Deaths classified by type of medical attention

Stratum	Institutional	Qualified medical practitioner	Unqualified medical practitioner	No. treatment	Total
1	2	3	4	5	6
I A ..	2	..	..	2	4
B ..	3	10	1	3	17
C ..	24	12	6	1	43
D ..	276	192	89	88	645
Northern region ..	305	214	96	94	709
II A ..	..	..	..	3	3
B ..	6	6	2	3	17
C ..	54	19	3	17	93
D ..	420	137	73	161	791
Southern region ..	480	162	78	184	904
State ..	785	376	174	278	1613

TABLE 18

Infant deaths observed and estimated according to sex and infant death rates for each stratum

Stratum	Infant death observed			Infant death estimated			Estimated live births	Infant death rate
	M	F	Total	M	F	Total		
1	2	3	4	5	6	7	8	9
I A ..	..	1	1	..	50	50	857	58·34
B ..	1	1	2	111	111	222	4345	51·09
C ..	2	4	6	194	388	582	23865	24·39
D ..	61	55	116	5189	4678	9867	215630	45·76
Northern region ..	64	61	125	5494	5227	10721	244697	43·81
II A ..	..	..	..	..	..	..	1582	..
B ..	1	..	1	170	..	170	5780	29·41
C ..	4	2	6	365	182	547	27907	19·60
D ..	33	26	59	2877	2266	5143	222026	23·16
Southern region ..	38	28	66	3412	2448	5860	257295	22·78
State ..	102	89	191	8906	7675	16581	501992	33·03

TABLE 19

Distribution of samples according to death rate of each sample

Death rate	Northern region		Southern region		State					
					1985		1984		1983	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
1	2	3	4	5	6	7	8	9	10	11
Less than 2 ..	..	..	3	3·4	3	2·0	3	2·0	5	3·3
2 and less than 3 ..	4	6·6	2	2·3	6	4·0	10	6·7	4	2·7
3 and less than 5 ..	14	23·0	19	21·4	33	22·0	34	22·6	32	21·3
5 and less than 7 ..	18	29·5	35	39·3	53	35·3	53	35·3	46	30·7
7 and less than 9 ..	13	21·3	18	20·2	31	20·7	23	15·3	37	24·7
9 and less than 11 ..	5	8·2	9	10·1	14	9·3	21	14·0	20	13·3
11 and less than 13 ..	6	9·8	2	2·2	8	5·3	4	2·7	5	3·3
13 and less than 15 ..	1	1·6	..	..	1	0·7	1	0·7	1	0·7
15 and above ..	..	..	1	1·1	1	0·7	1	0·7	..	..
Total ..	61	100·0	89	100·0	150	100·0	150	100·0	150	100·0

TABLE 20

Still births observed in selected samples and estimated and still birth rates for each stratum

Stratum	Still births observed			Still births estimated			Total estimated number of live births and still births	Still birth rate
	Male	Female	Total	Male	Female	Total		
1	2	3	4	5	6	7	8	9
I A ..	1	1	2	51	50	101	958	105·43
B ..	1	1	2	101	102	203	4548	44·64
C ..	3	4	7	291	388	679	24544	27·66
D ..	24	12	36	2041	1021	3062	218692	14·00
Northern Region ..	29	18	47	2484	1561	4045	248742	16·26
II A ..	..	..	..	..	..	..	1582	..
B ..	..	..	..	..	..	..	5780	..
C ..	1	1	2	91	91	182	28089	6.48
D ..	22	7	29	1918	610	2528	224554	11·26
Southern Region ..	23	8	31	2009	701	2710	260005	10·42
State ..	52	26	78	4493	2262	6755	508747	13·28

TABLE 21

Infant deaths in the selected samples of children born during previous year and current year

Stratum	Born in 1984								Born in 1985							
	Less than 7 days		28 days and less		29 days and less than 1 year		Total		Less than 7 days		28 days and less		29 days and less than 1 year		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
I A ..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1
B ..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	1
C ..	..	..	..	..	1	..	1	..	..	3	..	3	1	1	2	4
D ..	..	..	..	1	6	4	6	5	37	28	47	43	8	7	61	55
Northern Region ..	..	..	..	1	7	4	7	5	37	33	47	48	10	8	64	61
II A ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B ..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..
C ..	..	..	..	..	..	..	..	..	2	1	2	1	2	1	4	2
D ..	..	..	..	1	2	1	2	2	21	17	28	18	3	6	33	26
Southern Region ..	..	..	..	1	2	1	2	2	24	18	31	19	5	7	38	28
State ..	..	..	..	2	9	5	9	7	61	51	78	67	15	15	102	89

TABLE 22

Births and deaths detected through overlapping survey aad intensive enquiry classified according to place and type of birth and death

Stratum	Births					Deaths			
	Place		Type		Total	Place		Infant Deaths	Total
	In	Out	L.B.	S.B.		In	Out		
1	2	3	4	5	6	7	8	9	10
I A ..	..	..	..	..	..	..	..	..	..
B ..	..	1	1	..	1	1	..	..	1
C ..	..	6	6	..	6	..	..	..	..
D ..	36	73	108	1	109	13	13	7	26
Northern Region ..	36	80	115	1	116	14	13	7	27
II A ..	..	1	1	..	1	..	..	..	..
B ..	..	..	..	..	..	..	..	..	..
C ..	2	12	13	1	14	2	1	..	3
D ..	14	136	149	1	150	17	22	6	39
Southern Region ..	16	149	163	2	165	19	23	6	42
State ..	52	229	278	3	281	33	36	13	69

TABLE 23

Distribution of births and deaths recorded by Enumerators, Supervisors, detected through overlapping survey and intensive enquiry

Item	*Northern region*	*Southern region*	*State*
(1)	(2)	(3)	(4)
A. Births			
1. Common to Enumerator and Supervisor ..	1789	1946	3735
2. Registered by Enumerator No. ..	1969	2087	4056
Per cent ..	69·40	71·96	70·70
3. Listed by Supervisor No. ..	2526	2584	5110
Per cent ..	89·04	89·10	89·07
4. Total netted by Enumerator and Supervisor ..	2706	2725	5431
5. Detected by others ..	16	12	28
6. Overlapping survey ..	89	123	212
7. Intensive enquiry ..	26	40	66
Total births ..	2837	2900	5737
B. Deaths			
1. Common to Enumerator and Supervisor ..	507	678	1185
2. Registered by Enumerator No. ..	574	726	1300
Per cent ..	80·96	80·31	80·60
3. Listed by Supervisor No. ..	606	813	1419
Per cent ..	85·47	89·93	87·97
4. Total netted by Enumerator and Supervisor ..	673	861	1534
5. Detected by others ..	9	1	10
6. Overlapping survey ..	17	31	48
7. Intensive enquiry ..	10	11	21
Total deaths ..	709	904	1613

TABLE 24

Distribution of rate of marriage per 1,000 population and percentage distribution of marriages according to age and sex

Age group	Rate of marriage per 1,000 population						Percentage					
	First marriage		Remarriage		All marriages		First marriage		Remarriage		All marriages	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
15–19	1·3	42·2	0·1	0·7	1·4	42·9	1·4	32·7	1·7	14·1	1·4	32·1
20–24	31·9	66·6	1·0	1·6	32·9	68·2	28·4	49·4	20·0	28·2	28·1	48·5
25–29	68·8	25·5	1·7	1·7	70·5	27·2	50·2	15·4	28·3	25·6	49·2	15·8
30–34	28·2	5·1	1·6	1·8	29·8	6·9	17·0	2·3	21·6	20·5	17·2	3·0
35–39	5·2	0·6	1·3	0·8	6·5	1·4	2·5	0·2	15·0	7·7	3·0	0·5
40–44	1·1	..	0·8	0·3	1·9	0·3	0·5	..	6·7	2·6	0·7	0·1
45–49	0·4	..	0·8	0·2	1·2	0·2	..	..	6·7	1·3	0·4	..
15–49	22·0	28·1	0·9	1·2	22·9	29·3	100·0	100·0	100·0	100·0	100·0	100·0

TABLE 25

Life table of males based on age specific death rates for the year 1983, 1984 and 1985

Age x to x+n	Age specific death rate			Mean age specific death rate (n mx)	Probability of a person aged x dying before age x+n (qx)	Number of deaths (dx)	Number surviving to age x out of 100,000 born alive (lx)	Years of life lived between x and x+n (Lx)	Years of life lived at x and above x (Tx)	Expectation of life in years (Ex)	Beginning age (X)
	1983	1984	1985								
1	2	3	4	5	6	7	8	9	10	11	12
Less than one	46·57	39·40	36·67	0·04088	0·03861	3861	100000	96452	6567372	65·67	0
1–4	3·99	3·39	5·00	0·00413	0·01638	1575	96139	381406	6470920	67·31	1
5–9	1·56	1·03	1·11	0·00123	0·00613	580	94564	471370	6089514	64·40	5
10–14	0·80	0·69	0·49	0·00066	0·00330	310	93984	469145	5618144	59·78	10
15–19	0·99	1·42	0·93	0·00111	0·00554	519	93674	467073	5148999	54·97	15
20–24	0·92	1·58	1·88	0·00146	0·00727	677	93155	464083	4681926	50·26	20
25–29	2·17	2·54	2·10	0·00227	0·01129	1044	92478	459780	4217843	45·61	25
30–34	2·30	2·61	3·29	0·00273	0·01356	1240	91434	454070	3758063	41·10	30
35–39	3·21	2·75	3·13	0·00303	0·01504	1357	90194	447578	3303993	36·63	35
40–44	5·16	4·51	6·67	0·00545	0·02688	2388	88837	438215	2856415	32·15	40
45–49	7·94	5·91	6·61	0·00682	0·03353	2899	86449	424998	2418200	27·97	45
50–54	8·24	12·84	10·69	0·01059	0·05158	4310	83550	406975	1993202	23·86	50
55–59	15·21	16·77	13·97	0·01532	0·07377	5846	79240	381585	1586227	20·02	55
60–64	26·52	21·00	26·07	0·02453	0·11556	8481	73394	345768	1204642	16·41	60
65–69	33·13	30·26	37·13	0·03351	0·15460	10036	64913	299475	858874	13·23	65
70 and above	102·29	98·49	93·51	0·09810	1·00000	54877	54877	559399	559399	10·19	70

TABLE 26

Life table of females based on age specific death rates for the years—1983, 1984 and 1985

Age x to x+n	Age specific death rate			Mean age specific death rate (nmx)	Probability of a person aged X dying before age x+n (qx)	Number of deaths (dx)	Number surviving to age x out of 100000 born alive (lx)	Years of life lived between x and x+n (Lx)	Years of life lived at x and above x (Tx)	Expectation of life in years (Ex)	Beginning age (x)
	1983	1984	1985								
1	2	3	4	5	6	7	8	9	10	11	12
Less than 1	41·05	27·61	32·51	0·03372	0·03352	3352	100000	96892	7246034	72·46	0
1–4	5·07	2·86	3·98	0·00397	0·01576	1523	96648	383541	7149142	73·97	1
5–9	0·78	1·11	0·94	0·00094	0·00469	446	95125	474510	6765596	71·12	5
10–14	0·54	0·91	0·56	0·00067	0·00334	316	94679	472605	6291086	66·45	10
15–19	1·02	0·62	0·40	0·00068	0·00339	320	94363	471015	5818481	61·66	15
20–24	1·17	1·24	0·98	0·00113	0·00563	529	94043	468893	5347466	56·86	20
25–29	1·37	1·80	1·03	0·00140	0·00698	653	93514	465938	4878573	52·17	25
30–34	1·14	1·36	1·47	0·00132	0·00658	611	92861	462778	44 2635	47·52	30
35–39	1·16	1·40	1·12	0·00123	0·00613	565	92250	459838	3949857	42·82	35
40–44	3·31	1·06	1·36	0·00191	0·00950	871	91685	456248	3490019	38·07	40
45–49	2·99	3·61	2·71	0·00310	0·01538	1397	90814	450578	3033771	33·41	45
50–54	4·65	4·55	3·61	0·00427	0·02112	1888	89417	442365	2583193	28·89	50
55–59	7·59	5·93	5·77	0·00643	0·03164	2769	87529	430723	2140828	24·46	55
60–64	12·77	13·59	14·12	0·01349	0·06525	5531	84760	409973	1710105	20·18	60
65–69	16·22	23·26	22·57	0·02068	0·09832	7790	79229	376670	1300132	16·41	65
70 and above	70·03	75·59	86·16	0·07736	1·00000	71439	71439	923462	923462	12·93	70

TABLE 27

Life table of males and females together based on age specific death rates for the years 1983, 1984 and 1985

Age x to x+n	Age specific death rate			Mean age specific death rate (nmx)	Probability of a person aged x dying before age x+n (qx)	Number of deaths (dx)	Number surviving to age x out of 100,00 born alive (lx)	Years of life lived between x and x+n (Lx)	Years of life lived at x and above x (Tx)	Expectation of life in years (Ex)	Beginning age (x)
	1983	1984	1985								
1	2	3	4	5	6	7	8	9	10	11	12
Less than 1	43·86	33·53	34·62	0·03734	0·03606	3606	100000	96673	6891288	68·91	0
1–4	4·53	3·13	4·49	0·00405	0·01607	1549	96394	382478	6794615	70·49	1
5–9	1·17	1·07	1·03	0·00109	0·00544	516	94845	472935	6412137	67·61	5
10 14	0·67	0·80	0·53	0·00067	0·00334	315	94329	470858	5939202	62·96	10
15–19	1·01	1·01	0·66	0·00089	0·00444	417	94014	469028	5468344	58·17	15
20 24	1·05	1·40	1·39	0·00128	0·00638	597	93597	466493	4999316	53·41	20
25–29	1·74	2·15	1·52	0·00180	0·00896	833	93000	462918	4532823	48·74	25
30–34	1·70	1·97	2·35	0.00201	0·01000	922	92167	458530	4069905	44·16	30
35–39	2·15	2·04	2·07	0·00209	0·01040	949	91245	453853	3611375	39·58	35
40–44	4·20	2·74	3·89	0·00361	0·01789	1615	90296	447443	3157522	34·97	40
45–49	5·39	4·71	4·58	0·00489	0·02415	2142	88681	438053	2710079	30·56	45
50–54	6·40	8·53	6·95	0·00729	0·03580	3098	86540	424955	2272026	26·25	50
55–59	11·41	11·29	9·77	0·01082	0·05268	4396	83442	406220	1847071	22·14	55
60–64	19·42	17·18	19·77	0·01879	0·08973	7093	79046	377498	1440851	18·23	60
65–69	24·08	26·56	29·44	0·02669	0·12510	9001	71953	337263	1063353	14·78	65
70 and above	84·50	86·09	89·52	0·08670	1·00000	62952	62952	726090	726090	11·53	70

TABLE 28

Number of units and population in the universe and in samples

Stratum	Universe		Sample		Percentage of sample population	Raising factor for stratum estimates P/p
	No. of census villages	Population (1981) P	No. of units selected	Population (1981) p		
1	2	3	4	5	6	7
I A ..	73	33158	2	658	1·98	50·39210
B ..	217	171582	2	1540	0·90	111·41688
C ..	519	743395	6	7972	1·03	97·01392
D ..	1265	7421252	51	87246	1·17	85·05123
Northern Region ..	2074	8399387	61	97416	1·16	..
II A ..	260	87991	2	723	0·82	121·70263
B ..	415	325570	3	1915	0·59	170·01044
C ..	894	1353880	10	14845	1·09	91·20108
D ..	2134	10515577	74	120631	1·15	87·17143
Southern Region ..	3703	12283018	89	138114	1·12	..
State	5777	20682405	150	234530	1·14	..