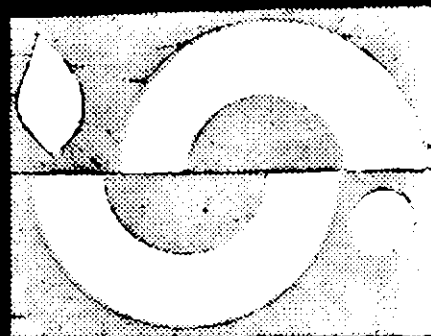




SAMPLE REGISTRATION SYSTEM 1987



VITAL STATISTICS DIVISION
OFFICE OF THE REGISTRAR GENERAL, INDIA
MINISTRY OF HOME AFFAIRS
NEW DELHI

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P R E F A C E

In the absence of dependable data from Civil Registration System, the Sample Registration System (SRS) is the main source of information on fertility and mortality indicators at state and national levels. The SRS mechanism involves collection of data through two different procedures viz., continuous enumeration and retrospective half-yearly survey which is followed by a process of matching of the two records and subsequent field verification of unmatched and partially matched events. The methodology provides a cross-check on the correctness and completeness of events of births and deaths listed in both the records.

This report while presenting data for the year 1987 gives a detailed account of the salient features of the SRS along with other aspects connected with the implementation of SRS. The report also contains an analysis of data relating to population composition, fertility and mortality. The analysis aims at describing the population composition by broad age-group, the overall levels of fertility as well as the level of fertility for different age groups of women, including married women, the overall level of mortality as well as the mortality level for various age-groups during the year 1987. It also aims at bringing out the rural-urban and inter-state differentials as well as sex-wise differentials, wherever relevant. Further, the analysis aims at indicating the changes over recent years. It may be noted that whenever comparative statements over time have been presented, only 15 major States are covered as against 17 in other statements. This happens because in two States viz., Bihar and West Bengal, SRS data had been deficient prior to 1980 and, hence, not presented.

The SRS is a Centre-State venture and the present study would not have been possible without active involvement of various State implementing agencies for whom my thanks are due. I am also thankful to the staff and officers of the Sample Registration Unit of Vital Statistics and Data Processing Divisions for their hard work. In particular, I am happy to place on record my appreciation of efforts put in by Dr. S.S. Srivastava, Joint Registrar General, Shri V.S. Swamy, Deputy Registrar General, Shri Sant Ram, Deputy Director of Census Operations and Shri Anand Kumar, Assistant Director of Census Operations in bringing out this report.



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A.R. NANDA
REGISTRAR GENERAL, INDIA

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CHAPTER 1

INTRODUCTION

The increasing acuteness of the population problem in India and the deficiencies in the statutory civil registration system have greatly intensified the need for quick and reliable estimates of birth and death rates on a current and continuous basis. The population census provides decadal vital rates. It does not provide a measure of the change in population from year to year. To measure short-term changes in the growth of population for projecting its future trends and to evaluate the results of the family planning programmes, there is need for resorting to alternate sources of data. There are various alternate methods based on the application of sampling techniques which have been tried and tested in many developing countries. Such methods include single and multi-round-retrospective surveys and the dual record system. In the absence of dependable vital rates from civil registration, the Office of the Registrar General, India, initiated the sample registration of births and deaths in India, popularly known as Sample Registration System (SRS) in 1964-65.

1.1 The main objective of SRS is to provide reliable estimates of birth and death rates at the state and national levels for rural and urban areas separately. However, SRS also provides various other measures of fertility and mortality.

1.2 The field investigation under SRS consists of continuous enumeration of births and deaths in a sample of villages/urban blocks by a resident part-time enumerator, preferably a local teacher, and an independent six monthly retrospective survey by a full-time supervisor. The data obtained through these two sources are matched. The unmatched and partially matched events are reverified in the field to get an unduplicated count of correct events. The advantage of this procedure, in addition to elimination of errors of duplication, is that it can lead to a quantitative assessment of the sources of distortion in the two sets of records. In that way it is a self-evaluating technique.

Basic structure of the System

1.3 The main components of SRS are:

- (i) Base-line survey of the sample unit to obtain usual resident population of the same area;
- (ii) Continuous (longitudinal) enumeration of vital events pertaining to usual resident population by the enumerator;
- (iii) An independent half-yearly survey for recording births and deaths which occurred during the half-year under reference and up-dating the Houselist and House-hold schedule by the supervisor;
- (iv) Matching of events recorded during continuous enumeration and those listed in course of half-yearly survey;
- (v) Field verification of unmatched and partially matched events.

1.4 Baseline Survey: The base-line survey is carried out prior to the start of continuous enumeration. This involves house numbering and houselisting and filling in of household schedule. Wherever a sound system of house numbering exists the same is adopted. Otherwise, the house numbering is done by the enumerator with the help of chalk and tar, etc. at a conspicuous place near the entrance of the house. The enumerator prepares a notional map showing important landmarks and location of the houses covered by the sample unit. He then prepares a list of houses/house-holds covered by the sample in the Houselist (Form 1) and fills-in the Household Schedule (Form 2) wherein he records the residential status and demographic particulars of each individual residing in the household e.g. name, sex, age, marital status and relation to head of household. Visitors to the household on the specified date, who are likely to stay in the household for a fairly long period, are also listed and their residential status is shown as 'V' as against 'UR' for usual residents. The inmates of public institutions like hotels, inns, schools and hospitals are excluded, but house-holds living permanently within the compound of such institutions are covered.

1.5 Enumeration: The enumerator maintains a Birth Record (Form 5) and Death Record (Form 6) in respect of his area. The enumerator is expected to record all births and deaths occurring within the sample unit, as well as those of the usual residents occurring outside the unit. The events to visitors occurring within the sample unit are also listed, but these are not taken into account while calculating rates. Thus the events to be enumerated by the enumerator are those pertaining to:

- (i) Usual residents inside the sample unit;
- (ii) Usual residents outside the sample unit;
- (iii) Visitors inside the sample unit.

1.6 For ensuring complete netting, the enumerator uses different means to keep himself informed of the occurrence of vital events in the sample unit. The enumerator takes the help of the village priest, barber, village headman, midwife and such other functionaries. He contacts these informants at frequent intervals and collects information about the occurrences of births and deaths. On being informed about the occurrence of an event, the enumerator visits the concerned household and records the prescribed particulars. The enumerator also keeps in touch with other socially important persons and visits local or nearby hospitals, nursing homes, cremation or burial grounds, at frequent intervals to keep himself informed about the occurrence of events. He is required to maintain a list of pregnant women so as to help netting all the birth events. Despite all these efforts, the enumerator may fail to have information about some of the events. So he is required to visit all the households once in each quarter so as to ensure that all the events have been recorded. In the urban areas, the enumerator is required to visit each household once a month so as to net all births and deaths pertaining to his area.

1.7 Half-yearly survey: Half yearly survey is carried out independently in each sample unit by a full-time supervisor. The supervisor visits households in the sample unit and records the particulars of births and deaths in Forms 3 & 4 pertaining to usual residents and visitors (only those occurring within the sample unit) which had occurred during the half-yearly period under reference. Simultaneously, he updates the Houselist and Household Schedule (initially filled-in by the enumerator) by making suitable entries for each birth, death or migration. In carrying out this survey he does not have access to the birth and death records of the enumerator which are withdrawn from the field before the supervisor is deputed for the half-yearly survey. Besides an overlapping reference period of one year is adopted in the survey in order to net the events which might have been missed in the previous half-yearly survey.

1.8 Matching: On completion of the half-yearly survey, the Forms 3 & 4 filled-in by the supervisors are compared with the Forms 5 & 6 filled-in by the enumerators. This is done either at the state or district headquarters. Each entry in the enumerator's and supervisor's records is matched item by item and events are classified as fully matched, partially matched and unmatched. The items generally considered for matching are location of the household i.e. name of the head of house-hold and house-number, name of the mothers (for birth) and name of the deceased (in case of death), residential status, sex and month of occurrence.

1.9 Field verification of unmatched and partially matched events: Every event whether unmatched or partially matched is verified by a visit to the concerned household. This is done either by a third person or jointly by the supervisor and the enumerator, depending upon the availability of staff.

1.10 Sample design: The Sample design adopted was a unistage stratified simple random sample without replacement. In rural areas each state was divided into a number of natural divisions. The natural divisions conform to the regions adopted by NSSO in their 32nd round. These natural divisions or regions were formed by grouping contiguous districts having similar topography, population density, cropping pattern and rainfall etc. Each natural division within a state has been stratified by grouping villages into four population size classes: (a) less than 500, (b) 500 to 999, (c) 1,000 to 1,999 and (d) 2,000 and above. In order to cover the village by one part-time enumerator, large size villages having population of more than 2,000 were segmented into two or more segments of equal size. A single random sample of villages and segments was selected without replacement in each State/UT. In urban areas stratification has been done on the basis of size class of the towns/cities. The towns/cities were grouped into five classes, viz:- (a) towns with population below 20,000 (b) towns with population of 20,000 and more but less than 50,000 (c) towns with population of 50,000 and more but less than 100,000 (d) towns with population of 100,000 and more but less than 1,000,000; and (e) towns with population of 1,000,000 and above. Each city with population 1,000,000 or more was treated as a separate stratum. The sampling unit in urban area was a Census enumeration block. A simple random sample of these enumeration blocks was selected without replacement from each of the size classes of towns/cities in each state/UT. Statement 'A' shows the sample size in rural and urban areas of different states.

STATEMENT A

Sample size by States/Union Territories

States/Union Territories	Rural	Urban	Total
<u>States</u>			
1. Andhra Pradesh	190	100	290
2. Arunachal Pradesh	45	5	50
3. Assam	200	54	254
4. Bihar	400	100	500
5. Gujarat	200	100	300
6. Goa*	40	29	69
7. Haryana	100	60	160
8. Himachal Pradesh	115	25	140
9. Jammu & Kashmir	100	66	166
10. Karnataka	250	110	360
11. Kerala	150	90	240
12. Madhya Pradesh	300	100	400
13. Maharashtra	190	140	330
14. Manipur	95	30	125
15. Meghalaya	65	20	85
16. Nagaland	20	5	25
17. Orissa	250	60	310
18. Punjab	100	60	160
19. Rajasthan	230	90	320
20. Sikkim	42	8	50
21. Tamil Nadu	190	140	330
22. Tripura	60	15	75
23. Uttar Pradesh	450	180	630
24. West Bengal	300	150	450
<u>Union Territories</u>			
1. A & N Islands	28	10	38
2. Chandigarh	2	13	15
3. D & N Haveli	10	-	10
4. Delhi	10	90	100
5. L.M.&A. Islands	2	3	5
6. Pondicherry	15	20	35
INDIA	4149	1873	6022

* Includes Daman & Diu.

1.11 Organisation: The SRS is being implemented through the Directorates of Economics & Statistics/Directorates of Health Services/Directorates of Census Operations. The implementing agencies for the rural sample are the respective Directorates of Economics & Statistics in the States of Kerala, Madhya Pradesh and Maharashtra, Directorates of Health Services in Andhra Pradesh, Gujarat, Haryana, Orissa, Punjab, Tamil Nadu, Directorate of Census Operations in these (except Kerala) and the remaining States/Union Territories. The implementing agencies for the urban sample are the Directorates of Health Services in Haryana, Orissa and Punjab, and the Directorates of Census Operations in the remaining States/Union Territories.

1.12 For continuous enumeration, there is an enumerator for each sample unit, who is usually a resident teacher employed on a part-time basis and is paid a small honorarium for this purpose. However, in certain states, full-time enumerators (Assistant Compilers) have been appointed for enumeration work in the urban areas in large cities. One full-time enumerator is usually assigned the work of enumeration in 6 to 8 sample units. For supervision and conduct of half-yearly surveys, there are full-time supervisors (Computors) at the state headquarters. One computer is usually assigned a set of 10 sample units for supervision work and another set of 10 units for conducting half-yearly surveys. The state headquarters have a complement of staff necessary for planning and organising various field operations, training of the field staff, effecting proper supervision and control, ensuring regular flow of returns from the field staff, forwarding of various returns to the Office of the Registrar General, India and undertaking certain minimum tabulations.

1.13 At the national level, the Vital Statistics Division of the Office of the Registrar General, India co-ordinates the implementation work, formulates and prescribes necessary standards, provides necessary instructions and guidance, undertakes tabulation and analysis of data and their dissemination.

1.14 Training and Supervision: Each enumerator is given the necessary training before he starts the work. This is followed by periodic training. In addition, he is provided with a manual of instructions for day to day consultation in order to sort out any difficulties in course of work. Each computer-supervisor is also given the necessary training with a view to enabling him to carry out the supervision work and conduct the half-yearly surveys properly and efficiently. He is provided with a manual of instructions for this purpose. Various state officials associated with the implementation of the SRS are also given necessary training. There is a manual for the staff of the state headquarters which provides detailed instructions and guidance with regard to the various stages of work involved at the state level. The manual is very comprehensive and covers all aspects of the system.

1.15 Supervision forms an important component of SRS. This is undertaken by the computer-supervisors. Each computer-supervisor is expected to supervise the enumeration work in a set of 10 sample units in each month. In addition, other staff and officers at the state headquarters undertake visits to sample units and inspect the work at the field level.

1.16 Flow of returns: An enumerator is required to send to the state headquarters on the first week of the following month, a monthly report (Form 10) in duplicate. This report is copied from the birth and death records. On the basis of the monthly reports received from the sample units, the state

headquarters are required to prepare a consolidated monthly report (Form 10A) and forward the same to the office of the Registrar General, India by the end of the following month. The monthly reports (Form 10) for the individual units remain at the state headquarters till the results of the half yearly survey are finalised. These are corrected in the light of the results of the half yearly survey and matching & field verification operations associated therewith. The finalised form 10 after necessary corrections and inclusion of additional events recorded during the survey is sent to the office of the Registrar General, India alongwith the half-yearly survey results in Form 11.

1.17 Estimation procedure: Estimations of births, deaths and population for both rural and urban areas are obtained using unbiased method of estimation. The estimates of birth and death rates are obtained as the ratios of the estimated births to the estimated population and the ratios of estimated deaths to the estimated population respectively.

C H A P T E R 2
AGE COMPOSITION OF POPULATION

Children aged 0-14 years comprise 37.9 percent of the total population (Statement 1). Population in the age group 15-49 years is 49.8 percent, while population aged 50 years and above is 12.4 percent of the total population. The differences between the male & female percentages are small.

STATEMENT - 1
Percent distribution of population
by broad age-groups, India, 1987

Sex	Age group		
	0-14	15-49	50 and above
Male	38.12	49.74	12.14
Female	37.57	49.76	12.67
Person	37.87	49.76	12.37

2.1 A comparison of rural and urban age composition of population shows that the percentage of child population (0-14) years in rural areas is higher than the corresponding percentage in urban areas (Statement 2). However, reverse is the case in respect of population aged 15-49 years which has a higher percentage in urban areas. Population aged 50 years and above has a slightly higher percentage in rural areas than in urban areas. The apparent difference between the rural-urban age composition of population may be mainly due to higher fertility in rural areas than in urban areas and migration of population from rural to urban areas. Higher fertility in rural areas as compared to urban areas would result in a higher percentage of child population in rural areas than in urban areas. Migration from rural to urban areas may be mostly for employment purposes and mainly concentrated in the age-group 15-49 years. This would tend to inflate/deflate the percentages of population aged

15-49 years in urban/rural areas. As a result of increase in percentage of population aged 15-49 years in urban areas, there would be corresponding reduction in the percentage of population aged 0-14 years and 50 years and above. Similarly as a result of decrease in the percentage of population aged 15-49 years in rural areas, there would be corresponding increase in the percentages of population and 0-14 years and 50 years and above.

STATEMENT - 2

Percent distribution of population by broad age-group by rural/urban, India 1987

Rural Urban	Sex			
		0-14	15-49	50 & above
Rural	Male	39.09	48.55	12.36
	Female	38.20	48.87	12.93
	Person	38.66	48.72	12.62
Urban	Male	34.97	53.72	11.31
	Female	35.39	52.80	11.81
	Person	35.17	53.27	11.56

2.2 Statewise variations in the age composition of population are observed from Statement 3. Kerala is found to have the lowest percentage of population in age group 0-14 years closely followed by Tamil Nadu, Punjab and Maharashtra. Bihar, Rajasthan and Uttar Pradesh are reported to have 40-42 percent child population and Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Madhya Pradesh and Orissa have around 37-39 percent population of children in the age group 0-14 years. More than 50 percent population in the (15-49) years age group is covered in Andhra Pradesh, Assam, Gujarat, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Orissa, Punjab, Tamil Nadu and West Bengal. Bihar, Haryana, Himachal Pradesh, Madhya

Pradesh, Rajasthan and Uttar Pradesh are reported to have 46-49 percent population in the age group 15-49 years. Around 13-14 percent population in the age group 50 year and above is contained in Andhra Pradesh, Himachal Pradesh, Kerala, Maharashtra, Punjab and Tamil Nadu. Assam is having about 10 per cent population in this age group.

STATEMENT - 3
Percent distribution of population
by broad age-group for major states, 1987

States	Age-groups		
	0-14	15-49	50 & above
Andhra Pradesh	36.46	49.96	13.58
Assam	37.88	52.50	9.62
Bihar	41.93	45.93	12.14
Gujarat	36.48	51.73	11.79
Haryana	39.58	49.44	10.98
Himachal Pradesh	38.19	47.90	13.91
Jammu & Kashmir	38.63	49.99	11.38
Karnataka	37.73	50.15	12.12
Kerala	31.70	53.46	14.84
Madhya Pradesh	39.54	48.43	12.03
Maharashtra	36.06	50.92	13.02
Orissa	37.05	50.52	12.43
Punjab	33.72	51.81	14.47
Rajasthan	41.66	47.49	10.85
Tamil Nadu	32.77	53.13	14.10
Uttar Pradesh	40.38	47.57	12.05
West Bengal	36.25	51.92	11.83

2.3 A comparison of the percentages of child population and population in the age-group 15-49 for the period 1978-82 and 1983-87 shows that the percentage of child population has gone up by 1 percent while the percentages of population in the age groups 15-49 years and 50 years & above have declined by one percent each (Statement 4).

STATEMENT - 4
Percent distribution of population
for India by rural/urban, 1978-82 & 1983-87

Sector	Age-group	1978-82	1983-87	Index with 1978-82=100
Rural	0-14	38.94	39.40	101
	15-49	38.44	48.00	99
	50 & above	12.62	12.60	100
Urban	0-14	35.87	36.03	100
	15-49	52.58	52.82	100
	50 & above	11.55	11.15	97
Total	0-14	38.32	38.64	101
	15-49	49.28	49.01	99
	50 & above	12.40	12.27	99

2.4 State-wise comparison of the percentage distribution of population for the periods 1978-82 and 1983-87 by broad age-groups is shown in Statement 5. It is observed that there is decline in the percentage of child population in all the states except Andhra Pradesh, Jammu & Kashmir, Punjab, Rajasthan and Uttar Pradesh. Percentages of population aged 15-49 years have increased in all states except Andhra Pradesh, Jammu & Kashmir, Madhya Pradesh, Rajasthan, Uttar Pradesh. In the age group 50 years and above there is increase in all states except Haryana, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh.

STATEMENT - 5

Percent distribution of population by broad age-group for major States 1978-82 & 1983-87

States	0-14			15-49			50 & above		
	78-82	83-87	Index*	78-82	83-87	Index*	78-82	83-87	Index*
Andhra Pradesh	36.96	37.21	101	49.75	49.32	99	13.29	13.47	101
Assam	39.62	38.10	96	50.98	52.44	103	9.40	9.46	101
Gujarat	38.52	37.62	98	50.09	50.90	102	11.38	11.48	101
Haryana	40.95	40.67	99	47.55	48.24	101	11.50	11.09	96
Himachal Pradesh	39.99	38.90	97	47.07	47.41	101	12.94	13.69	106
Jammu&Kashmir	39.06	39.53	101	49.88	49.40	99	11.06	11.07	100
Karnataka	38.18	38.31	100	49.75	49.59	100	12.07	12.10	100
Kerala	35.19	32.69	93	51.37	52.78	103	13.45	14.53	108
Madhya Pradesh	40.22	40.16	99	47.93	47.63	99	11.85	12.21	103
Maharashtra	37.19	36.75	99	50.18	50.56	101	12.63	12.69	100
Orissa	38.32	38.04	99	49.53	49.36	100	12.15	12.60	104
Punjab	34.64	34.94	101	50.47	51.10	101	14.89	13.96	94
Rajasthan	40.12	41.96	105	48.33	46.82	97	11.55	11.22	97
Tamil Nadu	34.63	33.67	97	51.54	52.65	102	13.82	13.68	99
Uttar Pradesh	39.56	41.31	104	47.80	46.51	97	12.64	12.18	96

*1983-87 figure expressed as percentage of the corresponding 1978-82 figures.

CHAPTER 3

MEASURES OF FERTILITY

Crude birth rate is the most commonly used measure of fertility. For the year 1987, the crude birth rate for India is found to be 32.2. The rate for rural areas is 33.7 which is much higher than the rate of 27.4 for urban areas. From Statement 6 it is seen that Kerala is having the lowest birth rate (21.7) and Uttar Pradesh is having the highest birth rate (37.9) closely followed by Bihar (36.6). Madhya Pradesh and Rajasthan have birth rates as 36.4 and 35.1 respectively. In respect of Kerala, Punjab and Tamil Nadu, the rural-urban differences are relatively small as compared to other states. There are five states having birth rate below 30. In the case of six states, viz. Assam, Bihar, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh, the birth rates exceed the all-India rate.

STATEMENT - 6

Crude birth rates, by rural/urban, India
and major States, 1987

India/State	Rural	Urban	Total
INDIA	33.7	27.4	32.2
Andhra Pradesh	30.9	28.2	30.3
Assam	34.9	25.7	34.2
Bihar	37.3	30.1	36.6
Gujarat	31.6	29.0	30.8
Haryana	35.4	31.3	34.5
Himachal Pradesh	31.4	22.7	30.8
Jammu & Kashmir	32.6	25.1	31.0
Karnataka	29.9	26.3	28.9
Kerala	21.5	22.3	21.7
Madhya Pradesh	37.5	31.9	36.4
Maharashtra	30.2	26.6	28.9
Orissa	31.6	25.7	31.0
Punjab	28.9	27.9	28.7
Rajasthan	36.3	29.8	35.1
Tamil Nadu	24.1	23.7	24.0
Uttar Pradesh	39.3	32.1	37.9
West Bengal	34.6	20.9	30.7

3.1 Statement 7 shows the distribution of states according to rural and urban birth rates. Kerala and Tamil Nadu have relatively low rural as well as urban birth rates. On the other extreme Bihar, Haryana, Madhya Pradesh and Uttar Pradesh have relatively very high birth rates for rural as well as urban areas. The rural birth rates are above 30 for all states except Kerala and Tamil Nadu.

STATEMENT - 7
Distribution of major states by
rural and urban birth rates for 1987

Rural Birth Rate	Urban Birth Rate		
	Below 25	25-30	30-35
Below 25	Kerala, Tamil Nadu	-	-
25-30	-	Karnataka, Punjab	-
30-35	Himachal Pradesh, West Bengal	Andhra Pradesh, Assam, Gujarat, Jammu & Kashmir, Maharashtra, Orissa	-
35 & above		Rajasthan	Bihar, Haryana, Madhya Pradesh, Uttar Pradesh

3.2 Statement 8 shows the average birth rate for India and major states for the periods 1978-82 and 1983-87. State-wise comparison of the average birth rate for the two periods shows decline in respect of eight states. Small increase in the birth rates in some of the states may be due to variations in the field work.

STATEMENT - 8
Average crude birth rates for India
and major states, 1978-82 & 1983-87

India/States	1978-82	1983-87	Index with 1978-82=100
INDIA	33.3	32.0	98
Andhra Pradesh	31.9	30.8	97
Assam	32.7	34.6	106
Gujarat	35.1	32.7	93
Haryana	36.1	35.7	99
Himachal Pradesh	30.8	31.1	101
Jammu & Kashmir	31.3	32.7	104
Karnataka	28.2	29.4	104
Kerala	25.9	23.1	89
Madhya Pradesh	37.6	37.7	100
Maharashtra	28.3	29.8	105
Orissa	32.4	32.2	99
Punjab	29.7	29.3	99
Rajasthan	37.0	38.2	103
Tamil Nadu	28.3	25.7	91
Uttar Pradesh	39.5	38.0	96

3.3 General Fertility Rate (GFR) is yet another measure of fertility expressed as the number of live births per thousand women in the reproductive age-group 15-49 years. This is found to be 142 for rural areas of India, 108 for urban areas and 134 for rural and urban areas combined (statement 9). Statewise rates indicate wide variations. The lowest rate is 77 for Kerala and the highest is 170 for Uttar Pradesh. The rural rates vary from 77 to 178, while the urban rates vary from 78 to 135. The states can be grouped as under on the basis of the rates for rural and urban areas combined:

Range	States
Below 100	Kerala, Tamil Nadu
100-125	Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Punjab
125-150	Assam, Haryana, Jammu & Kashmir, West Bengal
150-175	Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh

STATEMENT - 9

General fertility rates by rural/urban
India and major States, 1987

India/States	Rural	Urban	Total
INDIA	141.8	108.5	133.8
Andhra Pradesh	126.7	108.4	122.6
Assam	136.3	93.4	132.9
Bihar	167.9	133.4	164.4
Gujarat	126.8	114.2	122.9
Haryana	154.9	129.8	149.0
Himachal Pradesh	124.2	91.8	121.9
Jammu & Kashmir	137.3	96.6	128.1
Karnataka	122.9	102.3	117.1
Kerala	77.2	78.5	77.4
Madhya Pradesh	163.6	131.0	156.9
Maharashtra	123.2	104.6	116.4
Orissa	123.8	101.9	121.7
Punjab	117.7	111.3	115.9
Rajasthan	163.5	128.3	156.7
Tamil Nadu	92.1	87.2	90.4
Uttar Pradesh	178.5	134.6	169.7
West Bengal	145.2	82.5	126.6

3.4 A comparison of the GFRs for the periods 1978-82 and 1983-87 is given in Statement 10. For some states, the rates for the later period are slightly higher than those for the earlier period which may be due to variations in the field work.

STATEMENT - 10
Average general fertility rates for India
and major States, 1978-82 and 1983-87

India/States	1978-82	1983-87	Index with 1978-82=100
INDIA	139.7	139.5	100
Andhra Pradesh	128.2	126.3	99
Assam	131.6	135.2	103
Gujarat	145.2	133.0	92
Haryana	161.2	157.0	97
Himachal Pradesh	126.6	125.1	99
Jammu & Kashmir	131.9	137.2	104
Karnataka	114.7	120.5	105
Kerala	96.9	83.4	86
Madhya Pradesh	163.3	164.4	101
Maharashtra	116.1	121.2	104
Orissa	130.4	131.8	101
Punjab	124.3	120.6	97
Rajasthan	162.2	172.8	107
Tamil Nadu	109.3	98.0	90
Uttar Pradesh	174.0	174.0	100

3.5 Other measures of fertility are the Marital Fertility Rates. The general marital fertility rates are expressed as the number of live births per thousand married women in the reproductive age-group 15-49 years. This is found to be 180 for rural areas of India, 152 for urban areas and 174 for rural and urban combined (Statement 11). State-wise rates indicate variations. The lowest rate is 126 for Kerala and the highest is 213 for Assam. The rural rates vary from 126 to 217 and urban rates vary from 127 to 190. The states can be grouped as under on the basis of the rate for rural and urban areas combined:

Range	States
125-150	Kerala, Maharashtra, Tamil Nadu
150-175	Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Orissa, Punjab, West Bengal
175-200	Bihar, Madhya Pradesh, Rajasthan, Haryana, Jammu & Kashmir
200 and over	Assam, Uttar Pradesh

STATEMENT - 11

General marital fertility rates by rural/urban India and major States - 1987

India/States	Rural	Urban	Total
INDIA	179.6	152.5	173.6
Andhra Pradesh	156.6	146.0	154.4
Assam	216.7	166.4	213.0
Bihar	196.8	176.3	195.0
Gujarat	167.5	154.8	163.6
Haryana	191.0	175.3	187.6
Himachal Pradesh	166.0	131.6	163.8
Jammu & Kashmir	191.8	154.8	184.3
Karnataka	166.0	151.5	162.1
Kerala	125.6	127.8	126.0
Madhya Pradesh	188.0	171.7	185.0
Maharashtra	152.6	144.6	149.9
Orissa	164.2	145.6	162.5
Punjab	165.1	151.8	161.4
Rajasthan	187.1	163.4	182.9
Tamil Nadu	128.3	125.8	127.5
Uttar Pradesh	210.2	190.0	206.7
West Bengal	193.2	121.5	173.5

3.6 The age pattern of fertility is indicated by the age specific fertility rates. Statement 12 shows the age specific fertility rates for India. It is observed that fertility is relatively low in the age-group 15-19 years, but shoots up sharply to reach a peak in the age-group 20-24 years and remains almost equally high in the age-group 25-29 years, but comes down very much thereafter at an accelerated pace with increase in age. The rural age-specific fertility rates are very much higher than the corresponding urban rates, because the level of fertility in rural areas is higher than in urban areas. However, the age pattern of fertility is quite similar in both the areas.

STATEMENT - 12

Age specific fertility rates by
rural/urban India, 1987

Sector	Age-group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Rural	97.5	262.8	223.3	148.4	88.1	40.2	17.9
Urban	58.7	221.3	184.6	96.4	49.6	18.8	5.3
Total	88.3	252.3	213.5	135.9	78.8	35.5	15.1

3.7 The age pattern of fertility in different states is broadly similar to the aforementioned pattern. Statement 13 shows that the peak age-group in all the states is 20-24 years except in Bihar where fertility in the age-group 25-29 years is almost at the same level as in the age-group 20-24 years. Kerala having the lowest birth rate is found to have the lowest age specific fertility rates in all the age-groups except 15-19 age-group.

STATEMENT - 13

Age-specific fertility rates, India
and major States, 1987

India/State	15-19	20-24	25-29	30-34	35-39	40-44	45-49
INDIA	88.3	252.3	213.5	135.9	78.8	35.5	15.1
Andhra Pradesh	138.9	245.9	172.7	92.7	54.3	17.8	7.6
Assam	81.7	220.4	206.8	145.7	100.7	42.7	2.0
Bihar	105.4	257.2	258.6	198.2	135.3	69.8	40.0
Gujarat	39.6	264.7	216.2	115.4	52.8	21.6	5.8
Haryana	77.5	307.4	240.0	132.1	67.1	24.2	12.7
Himachal Pradesh	53.9	292.6	200.4	104.8	43.0	16.0	11.5
Jammu & Kashmir	57.0	219.1	217.6	173.1	89.9	43.6	24.7
Karnataka	87.9	228.7	181.1	104.6	53.8	22.5	8.5
Kerala	32.7	171.8	139.4	54.7	25.8	6.7	1.7
Madhya Pradesh	131.4	293.4	239.9	147.6	81.2	37.4	14.8
Maharashtra	94.5	264.6	191.6	91.3	33.0	11.8	5.9
Orissa	80.0	237.1	209.1	122.4	62.3	19.4	8.8
Punjab	22.4	241.2	229.5	117.6	51.0	15.8	6.8
Rajasthan	102.9	288.3	240.0	161.4	95.9	46.2	21.9
Tamil Nadu	64.2	204.6	150.8	70.7	26.7	7.2	3.0
Uttar Pradesh	87.8	287.6	270.8	206.3	139.6	69.1	31.6
West Bengal	95.5	233.0	190.9	128.8	73.6	35.2	11.5

3.8 Another measure of fertility computed for married women for different age groups is the age specific marital fertility rates. Statement 14 shows the age specific marital fertility rates for India. It is observed that fertility reaches its peak in the age group 20-24 and thereafter declines. A perceptible decline in the fertility is seen from the age-group 30-34 onwards.

STATEMENT - 14
Age specific marital fertility rates
by rural/urban, India, 1987

Sector	Age-group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Rural	248.5	318.4	239.5	157.2	95.2	40.2	21.5
Urban	299.2	325.1	208.6	103.2	53.7	21.4	6.5
Total	255.3	319.8	231.9	144.3	85.1	40.0	15.1

3.9 The age pattern of marital fertility in different states (rural and urban combined) is similar to the aforementioned pattern except in Kerala and Tamil Nadu where age specific marital fertility rates are significantly lower from 25-29 age-group and onwards age-groups.

STATEMENT - 15
Age specific marital fertility rates
India and major States, 1987

India/States	Age-group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
INDIA	255.3	319.8	231.9	144.3	85.1	40.0	15.1
Andhra Pradesh	314.7	291.6	186.1	99.9	60.0	20.9	9.6
Assam	380.1	382.5	268.3	166.4	113.9	51.3	2.6
Bihar	213.2	286.7	268.6	206.6	143.8	76.8	47.0
Gujarat	153.8	353.0	237.0	122.4	56.4	23.8	6.7
Haryana	242.6	350.2	247.2	135.3	69.9	26.0	14.3
Himachal Pradesh	267.6	364.8	210.1	109.9	46.5	17.8	13.6
Jammu & Kashmir	318.3	342.1	238.5	180.5	94.6	47.7	28.7
Karnataka	300.8	312.6	204.1	114.4	60.1	26.6	11.2
Kerala	298.5	330.0	173.3	62.6	29.8	8.1	2.2
Madhya Pradesh	243.8	322.4	250.1	154.2	86.2	41.3	17.5
Maharashtra	255.4	331.4	209.3	97.3	35.9	13.3	7.1
Orissa	274.0	304.1	222.5	129.5	66.8	22.0	10.9
Punjab	235.9	367.8	249.8	122.1	53.4	16.9	7.5
Rajasthan	191.9	308.8	246.0	167.0	101.7	50.6	25.3
Tamil Nadu	339.2	300.3	171.1	76.2	29.5	8.3	3.7
Uttar Pradesh	225.6	327.5	279.6	212.2	146.0	75.6	36.5
West Bengal	313.5	312.6	215.2	140.2	81.6	40.9	15.0

3.10 Differences in the pattern of child bearing can also be measured in terms of the mean age of fertility. It describes the age pattern of fertility of a synthetic cohort of hypothetical group of women viewed as having in their life time fertility experience recorded in a calendar year. The mean age of fertility has been calculated from the age specific fertility rates. Statement 16 shows the mean age of fertility for India and different states. The mean age of fertility for India is found to be 27.8 years. The highest value is 29.2 for Bihar and the lowest goes to Maharashtra and Tamil Nadu (25.8).

STATEMENT - 16

Mean age of fertility, India
and major States, 1987

India/States	Mean age of fertility
INDIA	27.8
Andhra Pradesh	25.9
Assam	28.1
Bihar	29.2
Gujarat	27.3
Haryana	27.3
Himachal Pradesh	26.7
Jammu & Kashmir	29.0
Karnataka	26.8
Kerala	26.3
Madhya Pradesh	27.1
Maharashtra	25.8
Orissa	27.1
Punjab	27.6
Rajasthan	28.0
Tamil Nadu	25.8
Uttar Pradesh	29.1
West Bengal	27.5

3.11 The cumulative value of the age specific fertility rates at the end of the reproductive period gives a measure of fertility known as total fertility rate (TFR). This indicates the average number of children expected to be born per woman during the entire span of reproductive period, if the age specific fertility rates continue to be the same and there is no mortality. The TFRs worked out on the basis of ASFRs of 1987 are given in statement 17. The TFR for India is found to be 4.1. Bihar, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh have values exceeding All-India. Uttar Pradesh has the highest TFR(5.5). On the other extreme, Kerala has the lowest TFR (2.2). The states have been categorised according to the values as under:-

<u>TFR</u>	<u>States</u>
2.0-3.0	Kerala, Tamil Nadu
3.0-4.0	Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Punjab and West Bengal
4.0-5.0	Assam, Haryana, Jammu & Kashmir, Madhya Pradesh and Rajasthan
5.0-6.0	Bihar and Uttar Pradesh

STATEMENT - 17

Total fertility rates by rural/urban
India and major States, 1987

India/States	Rural	Urban	Total
INDIA	4.4	3.2	4.1
Andhra Pradesh	3.8	3.1	3.6
Assam	4.1	2.6	4.0
Bihar	5.4	4.2	5.3
Gujarat	3.8	3.2	3.6
Haryana	4.5	3.6	4.3
Himachal Pradesh	3.7	2.5	3.6
Jammu & Kashmir	4.5	2.9	4.1
Karnataka	3.7	2.9	3.4
Kerala	2.2	2.2	2.2
Madhya Pradesh	5.0	3.8	4.7
Maharashtra	3.7	3.0	3.5
Orissa	3.8	3.0	3.7
Punjab	3.5	3.1	3.4
Rajasthan	5.0	3.9	4.8
Tamil Nadu	2.8	2.4	2.6
Uttar Pradesh	5.8	4.3	5.5
West Bengal	4.4	2.4	3.8

3.12 A comparison of TFRs for the period 1978-82 and 1983-87 indicates decline in the TFRs in almost all states(statement 18). The highest decline (17 percent) is observed in Kerala. At national level, there is a decline of 4 percent.

STATEMENT - 18

Total fertility rates, India and
major states, 1978-82 & 1983-87

India/States	1978-82	1983-87	Index with 1978-82=100
INDIA	4.5	4.3	96
Andhra Pradesh	4.0	3.8	95
Assam	4.1	4.1	100
Gujarat	4.5	3.9	87
Haryana	5.0	4.6	92
Himachal Pradesh	3.8	3.8	100
Jammu & Kashmir	4.4	4.4	100
Karnataka	3.6	3.6	100
Kerala	2.9	2.4	83
Madhya Pradesh	5.3	4.9	92
Maharashtra	3.6	3.6	100
Orissa	4.3	4.1	95
Punjab	3.9	3.6	92
Rajasthan	5.3	5.4	102
Tamil Nadu	3.4	2.9	85
Uttar Pradesh	5.8	5.6	97

3.13 The total marital fertility rate is the cumulative value of age specific marital fertility rates at the end of the reproductive period. It indicates the average number of children expected to be born per married woman during the entire span of the reproductive period, if the age specific marital fertility rates continue to be the same and there is no mortality. The TMFRs worked out on the basis of ASMRs of 1987 are given in statement 19. The TMFR for India is found to be 5.5. Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Uttar Pradesh and West Bengal have values exceeding the All-India rate. Kerala is having the lowest TMFR (4.5) and Assam the highest (6.8). The states have been categorised according to the values as under:-

TMFR

States

4-5	Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu
5-6	Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Orissa, Punjab Rajasthan, West Bengal
6-7	Assam, Bihar, Jammu & Kashmir Uttar Pradesh

STATEMENT - 19

Total Marital fertility rates by rural/urban
India and Major states, 1987

India/States	Rural	Urban	Total
INDIA	5.6	5.1	5.5
Andhra Pradesh	5.0	4.6	4.9
Assam	7.0	6.3	6.8
Bihar	6.3	5.8	6.2
Gujarat	4.9	4.6	4.7
Haryana	5.5	5.3	5.4
Himachal Pradesh	5.2	5.1	5.2
Jammu & Kashmir	6.4	6.1	6.2
Karnataka	5.2	5.1	5.2
Kerala	4.4	4.9	4.5
Madhya Pradesh	5.7	5.3	5.6
Maharashtra	4.8	4.9	4.8
Orissa	5.2	5.1	5.2
Punjab	5.4	5.0	5.3
Rajasthan	5.6	5.0	5.5
Tamil Nadu	4.7	4.6	4.6
Uttar Pradesh	6.6	6.2	6.5
West Bengal	6.0	4.6	5.6

3.14 When the age specific fertility rates are calculated on the basis of female births only, then the cumulative value of these ASFRs at the end of the reproductive period gives the Gross Reproduction Rate (GRR). This would indicate the average number of female children expected to be born per woman during the entire reproductive span of 15-49 years if there is no mortality, and the fertility schedules represented by the age specific fertility rates continue to remain the same. This is also considered as the replacement index. The GRR for India and major states are given in Statement 20. The GRR for India is found as 2.0. Kerala is having the lowest GRR, while Bihar and Uttar Pradesh are having the highest GRR. The rates for rural areas are in the range of 1.0 to 2.7 while the rates for urban areas are in the range of 1.1 to 2.1. The states have been grouped according to the values of GRR as under:

<u>GRR</u>	<u>States</u>
1.0-1.5	Kerala, Tamil Nadu
1.5-2.0	Andhra Pradesh, Assam, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Punjab and West Bengal
2.0-2.5	Haryana, Jammu & Kashmir, Madhya Pradesh, Rajasthan
2.5-3.0	Bihar and Uttar Pradesh

STATEMENT - 20

Gross reproduction rates by rural/urban,
India and major states, 1987

India/States	Rural	Urban	Total
INDIA	2.1	1.5	2.0
Andhra Pradesh	1.8	1.5	1.8
Assam	1.9	1.2	1.9
Bihar	2.6	2.1	2.5
Gujarat	1.8	1.5	1.7

STATEMENT - 20(Concl'd.)

India/States	Rural	Urban	Total
Haryana	2.1	1.8	2.0
Himachal Pradesh	1.8	1.2	1.7
Jammu & Kashmir	2.1	1.3	2.0
Karnataka	1.8	1.4	1.7
Kerala	1.0	1.1	1.1
Madhya Pradesh	2.4	1.9	2.3
Maharashtra	1.8	1.4	1.6
Orissa	1.9	1.5	1.8
Punjab	1.6	1.5	1.6
Rajasthan	2.4	1.7	2.2
Tamil Nadu	1.3	1.2	1.3
Uttar Pradesh	2.7	2.0	2.5
West Bengal	2.1	1.2	1.8

3.15 Information about the type of attention at birth is collected in respect of every birth recorded and, as such, this information is likely to be useful by way of indicating the extent of availability of institutional and professional medical help. Births are classified into four categories. All births which have taken place in hospitals and nursing homes etc. are categorised as institutional. All domiciliary births are classified according to whether these are attended by (i) trained professionals, or (ii) untrained professionals and others. The percentage distribution of births according to the type of attention at birth at the national level is shown in Statement 21. It is observed that institutional births comprise 21.2 percent of the total births. Births attended by trained professionals account for 19.3 percent and remaining 59.5 percent of births are found to have been attended by untrained professionals and others. So far as rural areas are concerned, institutional births comprise only 14.7 percent and births attended by trained professionals comprise 17.8 percent of the total births. The percentage of births attended by untrained professionals and others is 67.5 in the rural areas. In urban areas, there is a sharp contrast, as the births attended

by untrained professionals and others comprise only 25.8 per cent of the total births. The institutional births in urban areas comprise 48.7 per cent of the total births and the births attended by trained professionals comprise 25.5 per cent. These are much higher than the corresponding figure for the rural areas.

STATEMENT - 21

Percent distribution of births, by type of attention at birth by rural/urban, India, 1987

Sector	Type of attention at birth		
	Institutional	Attended by trained professionals	Attended by untrained professionals and others
Rural	14.7	17.8	67.5
Urban	48.7	25.5	25.8
Total	21.2	19.3	59.5

3.16 Statewise percentage distribution of births by type of attention before delivery for rural areas is shown in statement-22. In Kerala, 77.3 per cent of the total births are found to be institutional. In most of the states, the percentage of births attended by trained professionals is generally low except in Punjab and Haryana. In Kerala, the percentage of births attended by untrained professionals and others is the lowest (14.6). This is followed by Haryana (19.5) and Punjab (26.3). In Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh, over four-fifths of the births is attended by untrained professionals and others.

STATEMENT - 22

Percent distribution of births by type of attention at birth in rural areas of major States, 1987

State	Type of attention at birth		
	Institu- tional	Attended by trained pro- fessionals	Attended by untrained professionals & others
Andhra Pradesh	15.0	21.5	63.5
Assam	10.7	8.0	81.3
Bihar	9.2	11.5	79.3
Gujarat	15.5	34.5	50.0
Haryana	15.9	64.6	19.5
Himachal Pradesh	21.9	12.6	65.5
Jammu & Kashmir	6.9	15.9	77.2
Karnataka	19.3	29.8	50.9
Kerala	77.3	8.1	14.6
Madhya Pradesh	2.7	11.1	86.2
Maharashtra	20.8	10.4	68.8
Orissa	3.6	13.8	82.6
Punjab	6.7	67.0	26.3
Rajasthan	1.5	9.8	88.7
Tamil Nadu	30.2	20.9	48.9
Uttar Pradesh	2.6	17.0	80.4
West Bengal	21.4	6.8	71.8

3.17 In urban areas, percentages of institutional births are much higher than those in rural areas (Statement-23). The percentages of births attended by trained professionals are also generally higher as compared to corresponding percentages for rural areas. Kerala has recorded the highest percentage of institutional births (86.0) followed by Tamil Nadu (78.4). The lowest percentage of births attended by untrained professionals and others is found to be 4.1 for Kerala. The highest percentage is found to be 53.1 for Rajasthan closely followed by Bihar(47.3).

STATEMENT - 23

Percent distribution of births by type of attention at birth for urban areas of major States, 1987

States	Type of attention at birth		
	Institutional	Attended by untrained professionals	Attended by untrained professionals and others
Andhra Pradesh	66.8	12.1	21.1
Assam	46.7	14.3	39.0
Bihar	26.6	26.1	47.3
Gujarat	57.6	13.5	28.9
Haryana	20.6	60.0	19.4
Himachal Pradesh	47.2	35.1	17.7
Jammu & Kashmir	27.6	37.2	35.2
Karnataka	58.8	16.5	24.7
Kerala	86.0	9.9	4.1
Madhya Pradesh	47.6	14.2	38.2
Maharashtra	73.2	18.8	8.0
Orissa	30.4	23.0	46.6
Punjab	9.4	82.0	8.6
Rajasthan	17.0	29.9	53.1
Tamil Nadu	78.4	12.0	9.6
Uttar Pradesh	13.5	48.4	38.1
West Bengal	76.9	10.2	12.9

3.18 State-wise percentage distribution of births by type of attention at birth for rural and urban combined, is shown in statement 24. In the case of institutional births, Kerala is having the highest value (79.0). The lowest percentage of institutional births is recorded in Rajasthan (4.1). In the case of births attended by untrained professionals and others the highest percentage is recorded in Rajasthan and the lowest in Kerala.

STATEMENT - 24

Percent distribution of births by type of attention at birth for rural and urban combined, major States, 1987

States	Type of attention at birth		
	Institu- tional	Attended by trained pro- fessionals	Attended by untra- ined professionals and others
Andhra Pradesh	30.0	18.8	51.2
Assam	16.2	9.0	74.8
Bihar	11.1	13.1	75.8
Gujarat	21.9	31.3	46.8
Haryana	16.9	63.6	19.5
Himachal Pradesh	26.1	16.4	57.5
Jammu & Kashmir	11.5	20.6	67.9
Karnataka	29.1	26.5	44.4
Kerala	79.0	8.4	12.6
Madhya Pradesh	10.5	11.6	77.9
Maharashtra	34.5	12.7	52.8
Orissa	7.2	15.0	77.8
Punjab	7.5	71.3	21.2
Rajasthan	4.1	13.1	82.8
Tamil Nadu	41.9	18.7	39.4
Uttar Pradesh	4.4	22.2	73.4
West Bengal	28.9	7.3	63.8

C H A P T E R - 4
MEASURES OF MORTALITY

The estimated crude death rate for India for 1987 is found to be 10.9 (Statement 25). The rate for rural areas is 12.0 which is very much higher than the urban rate (7.4). Among major States, Uttar Pradesh has the highest death rate (14.5). In Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh the death rates are higher than that of India. Kerala has the lowest death rate (6.1). The States have been grouped on the basis of rural and urban death rates as under:-

Rural death rate	Urban death rate		
	Below 7.0	7.0-9.0	9.0-11.0
Below 7.0	Kerala	-	-
7.0-9.0	Himachal Pradesh Jammu & Kashmir	Punjab	-
9.0-11.0	Haryana, Karnataka Maharashtra, West Bengal	Andhra Pradesh Gujarat	-
11.0-13.0	-	Assam, Rajasthan Tamil Nadu	-
13.0 & above	-	Bihar, Madhya Pradesh, Orissa	Uttar Pradesh

STATEMENT - 25

Estimated crude death rates by rural/urban,
India and major States, 1987

India/States	Rural	Urban	Total
INDIA	12.0	7.4	10.9
Andhra Pradesh	10.7	7.3	9.9
Assam	11.9	8.1	11.6
Bihar	13.6	8.0	13.1
Gujarat	10.8	7.6	9.8
Haryana	9.4	6.9	8.8
Himachal Pradesh	8.7	5.3	8.5
Jammu & Kashmir	8.0	6.4	7.7
Karnataka	9.7	6.1	8.7
Kerala	6.1	6.2	6.1
Madhya Pradesh	14.6	8.0	13.3
Maharashtra	9.5	6.1	8.3
Orissa	13.7	7.8	13.1
Punjab	8.5	7.1	8.1
Rajasthan	12.5	7.8	11.6
Tamil Nadu	11.1	7.6	9.9
Uttar Pradesh	15.5	9.9	14.5
West Bengal	9.7	6.5	8.8

4.1 There has been a decline in the mortality level as indicated by the average crude death rates for the period 1978-87 given in Statement 26. The margin of decline is the highest (16 percent) in Haryana. There is a slight increase in mortality in Assam which may be due to variations in field work.

STATEMENT - 26

Average estimated crude death rates, India
and major States, 1978-82 and 1983-87

India/States	1978-82	1983-87	Index with 1978-82=100
INDIA	12.7	11.6	91
Andhra Pradesh	11.8	10.3	87
Assam	12.0	12.5	104
Gujarat	12.3	10.7	87
Haryana	11.1	9.3	84
Himachal Pd.	10.7	9.7	91
Jammu&Kashmir	9.6	8.9	93
Karnataka	10.1	9.0	89
Kerala	6.8	6.4	94
Madhya Pd.	15.4	14.0	91
Maharashtra	9.8	8.7	89
Orissa	13.9	13.4	96
Punjab	9.5	8.7	92
Rajasthan	13.6	12.9	95
Tamil Nadu	11.8	10.3	87
Uttar Pradesh	16.9	15.7	93

4.2 Statement 27 gives estimated death rates by sex separately for rural and urban areas at the national level. In rural areas, female mortality exceeds male mortality. In urban areas, a reverse pattern is observed.

STATEMENT - 27

Estimated death rates by sex and
by rural/urban India, 1987

Sector	Male	Female
Rural	11.9	12.1
Urban	7.7	7.1
Total	10.9	11.0

4.3 Statewise male and female death rates are shown in Statement 28. It is seen that female death rate is lower than male death rate in 9 States. The position is reverse in the case of Bihar, Gujarat, Haryana, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

STATEMENT - 28
Estimated death rates by sex,
major States, 1987

States	Male	Female
Andhra Pradesh	10.4	9.4
Assam	11.7	11.5
Bihar	12.5	13.7
Gujarat	9.7	9.9
Haryana	8.7	9.0
Himachal Pradesh	9.0	8.0
Jammu & Kashmir	9.0	6.3
Karnataka	9.0	8.3
Kerala	7.0	5.3
Madhya Pradesh	12.9	13.7
Maharashtra	8.8	7.8
Orissa	12.8	13.3
Punjab	8.7	7.5
Rajasthan	11.2	12.1
Tamil Nadu	10.2	9.5
Uttar Pradesh	13.7	15.4
West Bengal	8.8	8.9

4.4 It is seen from Statement 29 that infant mortality rate for India for 1987 is 95 per thousand live births. The rural rate (104) is higher than the urban rate (61). Among the major States, the lowest rate is recorded for Kerala (28). The highest rate is recorded for Uttar Pradesh (127). The rural rates are higher than the urban rates in respect of all states except Punjab. The states can be grouped according to the level of infant mortality as under:-

<u>Infant mortality</u>	<u>States</u>
25-50	Kerala
50-75	Jammu & Kashmir, Maharashtra Punjab and West Bengal
75-100	Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka and Tamil Nadu
100-125	Assam, Bihar, Madhya Pradesh and Rajasthan
125-150	Orissa and Uttar Pradesh

STATEMENT - 29

Estimated infant mortality rates by
rural/urban, India and major states, 1987

India/States	Rural	Urban	Total
INDIA	104	61	95
Andhra Pradesh	84	58	79
Assam	104	69	102
Bihar	104	72	101
Gujarat	113	59	97
Haryana	93	61	87
Himachal Pradesh	84	44	82
Jammu & Kashmir	77	47	71
Karnataka	86	41	75
Kerala	29	25	28
Madhya Pradesh	128	81	120
Maharashtra	76	47	66
Orissa	131	75	126
Punjab	62	63	62
Rajasthan	108	69	102
Tamil Nadu	86	54	76
Uttar Pradesh	136	80	127
West Bengal	77	43	71

4.5 The infant mortality rates by sex are presented in statement 30 for major states. The states having higher male infant mortality rates as compared to female infant mortality rate are Andhra Pradesh, Assam, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Orissa and West Bengal.

STATEMENT - 30
Infant mortality rates by sex, India
and major States, 1987

India/States	Male	Female
INDIA	95	96
Andhra Pradesh	80	77
Assam	103	100
Bihar	99	104
Gujarat	90	106
Haryana	79	95
Himachal Pradesh	77	87
Jammu & Kashmir	74	69
Karnataka	79	71
Kerala	27	28
Madhya Pradesh	122	118
Maharashtra	73	59
Orissa	137	113
Punjab	60	66
Rajasthan	97	107
Tamil Nadu	70	82
Uttar Pradesh	126	128
West Bengal	73	68

4.6 Statement 31 presents the state-wise average infant mortality rates during the periods 1978-82 and 1983-87. The average infant mortality rates among states for the period 1983-87 are found to be lower than those for the period 1978-82 except in Himachal Pradesh and Jammu and Kashmir. The extent of decline is found to be 24 percent in respect of Punjab.

STATEMENT - 31

Average estimated infant mortality rates, India
and major states, 1978-82 and 1983-87

India/States	1978-82	1983-87	Index with 1978-82=100
INDIA	115	99	86
Andhra Pradesh	96	80	83
Assam	107	103	96
Gujarat	117	103	88
Haryana	101	90	89
Himachal Pradesh	83	85	102
Jammu & Kashmir	72	77	107
Karnataka	74	72	97
Kerala	38	30	79
Madhya Pradesh	141	121	86
Maharashtra	78	70	90
Orissa	138	128	93
Punjab	91	69	76
Rajasthan	112	110	98
Tamil Nadu	94	80	85
Uttar Pradesh	159	142	89

4.7 The contribution of infant deaths to total deaths is about 28 percent at the national level (Statement 32). Among major states, Kerala is having the lowest percentage of infant deaths to total deaths while the percentages in the states of Haryana, Madhya Pradesh and Uttar Pradesh are in the range of 32-34. In the case of rural areas, the percentage of infant deaths is 29 as against 20 for urban areas at the national level. About 30-36 percent of infant deaths to total deaths in the rural areas is in Assam, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Rajasthan, Madhya Pradesh, Orissa and Uttar Pradesh. The lowest urban percentage is 9 for Kerala and the highest is 32 for Madhya Pradesh. The states can be categorised on the basis of the percentage of infant deaths as under:-

<u>Percentage of infant deaths</u>	<u>States</u>
Below 10	Kerala
10-15	-
15-20	Tamil Nadu
20-25	Andhra Pradesh, Karnataka Maharashtra, Punjab and West Bengal
25-30	Bihar, Himachal Pradesh, Jammu & Kashmir, Orissa
30 and above	Assam, Gujarat, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh

STATEMENT - 32

percentage of infant deaths to total
deaths by rural/urban, India and
major states, 1987

India/States	Rural	Urban	Total
INDIA	29.21	20.40	28.13
Andhra Pradesh	24.57	22.22	24.20
Assam	30.61	22.11	30.17
Bihar	28.50	26.79	28.39
Gujarat	32.89	21.33	30.17
Haryana	35.13	27.73	33.82
Himachal Pradesh	30.26	18.87	29.77
Jammu & Kashmir	31.09	18.39	28.84
Karnataka	26.60	17.60	24.89
Kerala	10.10	8.90	9.88
Madhya Pradesh	33.05	32.00	32.92
Maharashtra	24.00	20.48	23.07
Orissa	30.21	24.57	29.89
Punjab	21.18	24.97	22.06
Rajasthan	31.24	26.28	30.72
Tamil Nadu	18.82	16.94	18.33
Uttar Pradesh	34.31	25.75	33.20
West Bengal	27.43	13.89	24.61

4.8 Statement 33 presents the neo-natal and post neo-natal mortality rates for India for the year 1987. It may be seen that neo-natal mortality rates are much higher than post neo-natal mortality rates in respect of both rural and urban areas. Moreover the neo-natal mortality rates as well as the post neo-natal mortality rates for rural areas are higher than the corresponding rates for urban areas.

STATEMENT - 33

Neo-natal and post neo-natal mortality rates by rural/urban, India, 1987

Sector	Neo-natal mortality	Post neo-natal mortality
Rural	63.6	40.5
Urban	33.3	27.3
Total	57.7	37.7

4.9 Among the major states, the highest neo-natal mortality rate is 86.2 for Orissa (Statement 34). The lowest rate is 19.3 for Kerala. The highest post neo-natal mortality rate is 55.5 for Uttar Pradesh and the lowest is 8.6 for Kerala. The distribution of states on the basis of neo-natal and post neo-natal mortality rates is as follows:-

Neo-natal mortality rate	Post neo-natal mortality rate		
	Below 25	25-50	50-75
Below 25	Kerala	-	-
25-50	Maharashtra	Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Tamil Nadu & West Bengal	-
50-75	Andhra Pradesh Karnataka	Assam, Bihar Gujarat, Rajasthan	Madhya Pradesh Uttar Pradesh
75-100		Orissa	-

STATEMENT - 34

Neo-natal and post neo-natal mortality rates
for major states, 1987

States	Neo-natal	Post-natal
Andhra Pradesh	54.6	24.7
Assam	74.0	28.4
Bihar	60.0	41.3
Gujarat	56.0	41.5
Haryana	45.7	41.0
Himachal Pradesh	38.1	44.1
Jammu & Kashmir	41.6	29.8
Karnataka	53.3	21.5
Kerala	19.3	8.6
Madhya Pradesh	66.0	54.2
Maharashtra	47.5	18.9
Orissa	86.2	40.3
Punjab	32.3	30.2
Rajasthan	61.3	40.6
Tamil Nadu	47.6	28.0
Uttar Pradesh	71.4	55.5
West Bengal	41.2	29.5

4.10 The State-wise percentages of neo-natal and post neo-natal deaths to infant deaths are shown in Statement 35. It is seen that neo-natal deaths account for 60 per cent of infant deaths at the national level. The post neo-natal deaths account for 40 per cent of infant deaths.

STATEMENT - 35

Percentages of neo-natal and post neo-natal
deaths to total infant deaths, India
and major states, 1987

India/States	Neo-natal	Post-natal deaths
INDIA	60.37	39.63
Andhra Pradesh	68.81	31.19
Assam	72.39	27.61
Bihar	59.24	40.76
Gujarat	55.96	47.11
Haryana	52.89	47.11
Himachal Pradesh	46.39	53.61
Jammu & Kashmir	58.23	41.77
Karnataka	71.27	28.73
Kerala	69.23	30.77
Madhya Pradesh	54.92	45.08
Maharashtra	71.59	28.41
Orissa	68.14	31.86
Punjab	51.64	48.36
Rajasthan	60.17	39.83
Tamil Nadu	62.96	37.04
Uttar Pradesh	56.28	43.72
West Bengal	58.30	41.70

4.11 Statement 36 shows the peri-natal mortality rates for rural and urban areas of India for 1987 along with corresponding still birth rates. The peri-natal mortality rate for rural areas is found to be higher than that for urban areas. For rural and urban areas combined the peri-natal mortality rate is found to be 50.1. The still birth-rate is found to be 12.9.

STATEMENT - 36

Estimated peri-natal mortality rate and still
birth rate by rural/urban India, 1987

Sector	Peri-natal mortality	Still birth rate
Rural	54.4	13.6
Urban	32.4	9.8
Total	50.1	12.9

4.12 Statement 37 gives peri-natal mortality rates and still birth rates for major states. The highest peri-natal mortality rate is 73.2 for Orissa which is followed by Assam (68.7). Kerala has the lowest rate (24.9).

STATEMENT - 37

Estimated peri-natal mortality rates and still
birth rates, major states, 1987

States	Peri-natal mortality rate	Still birth rate
Andhra Pradesh	50.5	10.0
Assam	68.7	16.7
Bihar	46.9	11.4
Gujarat	49.6	8.1
Haryana	48.3	15.6
Himachal Pradesh	39.7	16.6
Jammu & Kashmir	57.8	32.3
Karnataka	57.0	18.1
Kerala	24.9	11.1
Madhya Pradesh	51.8	12.4
Maharashtra	47.0	13.6
Orissa	73.2	21.8
Punjab	44.8	23.7
Rajasthan	52.0	9.0
Tamil Nadu	51.2	13.4
Uttar Pradesh	52.1	11.6
West Bengal	39.7	14.8

4.13 Statement 38 presents sex-wise death rate for children aged 0-4 years at the national level. It is seen that death rate among children aged 0-4 years is 35.2 per 1000 child population. The rural rate (39.7) is almost twice the urban rate (18.2). Also the female death rate is higher than the male death rate both in rural and urban areas.

STATEMENT - 33
Estimated death rates for children aged 0-4 years by rural, urban and by sex, India, 1987

Sector	Male	Female	Person
Rural	37.8	41.8	39.7
Urban	18.1	18.2	18.2
Total	33.6	36.8	35.2

4.14 State-wise estimated death rates among children aged 0-4 years are shown in Statement 39. The lowest rate is found to be 7.6 for Kerala, while the highest is found to be 52.0 for Uttar Pradesh. The distribution of states according to rural and urban rates is as follows:

Rural rates	Urban rates	
	Below 15	15-30
Below 15	Kerala	-
15-30	Himachal Pradesh, Maharashtra, Jammu & Kashmir, Karnataka and West Bengal	Andhra Pradesh, Punjab, Tamil Nadu
30-45	-	Assam, Bihar, Gujarat, Haryana Rajasthan
45 and above	-	Madhya Pradesh, Orissa and Uttar Pradesh

STATEMENT - 39

Estimated death rates for children aged 0-4 years by rural/urban, major states, 1987

States	Rural	Urban	Total
Andhra Pradesh	29.9	17.0	27.0
Assam	37.1	21.8	36.2
Bihar	41.8	20.4	40.0
Gujarat	40.9	17.2	33.3
Haryana	31.0	17.6	28.1
Himachal Pradesh	23.0	10.0	22.3
Jammu & Kashmir	21.3	14.2	20.1
Karnataka	29.6	12.2	25.1
Kerala	7.7	7.5	7.6
Madhya Pradesh	55.4	24.4	49.5
Maharashtra	24.9	13.7	21.1
Orissa	50.1	22.3	47.6
Punjab	24.5	18.1	20.4
Rajasthan	43.9	24.0	40.5
Tamil Nadu	26.0	17.5	23.2
Uttar Pradesh	56.9	29.6	52.0
West Bengal	27.1	13.8	24.3

4.15 Statement 40 presents the percentage of deaths among children aged 0-4 years. It is seen that the percentage of deaths in the age group 0-4 years is 42 percent of the total deaths at the national level. The rural percentage (44) is much higher than the urban percentage (29). Kerala is having the lowest percentage while Madhya Pradesh is having the highest percentage followed by Rajasthan. The rural figures are higher than the urban figures. The states are grouped on the basis of percentage of deaths among children 0-4 years as under:-

Percentages of deaths among children aged 0-4 years

	<u>States</u>
Below 20	Kerala
20-30	Punjab, Tamil Nadu
30-40	Andhra Pradesh, Himachal Pradesh, Jammu & Kashmir, Karnataka, Maharashtra and West Bengal
40 & above	Assam, Bihar, Gujarat, Haryana, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh

STATEMENT - 40

Percentage of deaths among children aged 0-4 years to total deaths by rural/urban, India and major states, 1987

<u>India/States</u>	<u>Rural</u>	<u>Urban</u>	<u>Total</u>
INDIA	44.29	29.38	41.98
Andhra Pradesh	33.05	28.87	32.39
Assam	43.70	27.69	42.87
Bihar	45.09	35.76	44.52
Gujarat	45.39	29.11	41.56
Haryana	47.61	34.84	45.35
Himachal Pradesh	35.85	18.87	35.11
Jammu & Kashmir	39.13	24.86	36.61
Karnataka	38.82	23.92	35.99
Kerala	13.40	12.67	13.26
Madhya Pradesh	52.85	40.67	51.40
Maharashtra	34.33	26.41	32.23
Orissa	46.22	33.81	45.51
Punjab	29.28	29.02	29.22
Rajasthan	52.81	42.26	51.10
Tamil Nadu	25.45	24.46	25.19
Uttar Pradesh	51.66	39.64	50.11
West Bengal	40.44	20.68	36.31

4.16 From Statement 41, it may be seen that death rate among children aged 5-14 years at the national level is 2.4 per thousand population. Urban areas have a much lower value (1.3). Female death rate is found to be higher than male death rate in the rural and urban areas.

STATEMENT - 41
Estimated death rate for children aged
5-14 years by rural/urban and
by sex, India, 1987

Sector	Male	Female	Person
Rural	2.4	3.0	2.7
Urban	1.2	1.4	1.3
Total	2.2	2.7	2.4

4.17 Statement 42 presents the estimated death rates among children aged 5-14 years for major states. Uttar Pradesh has the highest rate (3.5) followed by Bihar (3.4) and Madhya Pradesh (3.2). The lowest rate is recorded for Kerala (0.8). The urban rates are lower than the rural rates. The highest urban rate is found to be 2.2 as against 3.8 for rural areas. The states can be grouped on the basis of death rates among children aged 5-14 years as under:-

<u>Rate</u>	<u>States</u>
Below 1.0	Kerala
1.0 - 2.0	Haryana, Himachal Pradesh Jammu & Kashmir, Karnataka Maharashtra, Punjab
2.0 - 3.0	Andhra Pradesh, Assam, Gujarat Orissa, Rajasthan, Tamil Nadu and West Bengal
3.0 - 4.0	Madhya Pradesh, Bihar and Uttar Pradesh

STATEMENT - 42

Estimated death rates for children aged 5-14
years by rural/urban, major states, 1987

States	Rural	Urban	Total
Andhra Pradesh	2.2	1.1	2.0
Assam	2.8	1.6	2.7
Bihar	3.6	1.5	3.4
Gujarat	2.4	1.5	2.1
Haryana	1.2	1.2	1.2
Himachal Pradesh	1.7	0.0	1.6
Jammu & Kashmir	1.2	0.4	1.1
Karnataka	1.6	1.0	1.4
Kerala	0.8	1.0	0.8
Madhya Pradesh	3.6	1.0	3.2
Maharashtra	1.5	0.8	1.2
Orissa	2.8	1.4	2.7
Punjab	1.4	0.3	1.1
Rajasthan	2.7	1.4	2.5
Tamil Nadu	2.3	1.3	2.0
Uttar Pradesh	3.8	2.2	3.5
West Bengal	2.1	1.5	2.0

4.18 Statement 43 presents death rate in the age group 15-34 years by sex and by rural/urban. It is seen that the death rate for the age-group 15-34 years at the national level is 2.7 per thousand population. Female death rate is higher than the male death rate both in rural and urban areas. Also the rural death rates are higher than the urban death rates.

STATEMENT - 43

Estimated death rates for age-group
15-34 years by rural/urban and by
sex India, 1987

Sector	Male	Female	Person
Rural	2.5	3.3	2.9
Urban	1.7	2.0	1.9
Total	2.3	3.0	2.7

4.19 Statement 44 gives death rate in the age group 15-34 years for major states. The lowest rate is observed for Kerala, while the highest is observed for Bihar closely followed by Uttar Pradesh. The rural rate is higher than urban rate.

STATEMENT - 44

Estimated death rates for age-group
15-34 years by rural/urban,
major states, 1987

States	Rural	Urban	Total
Andhra Pradesh	3.0	1.7	2.7
Assam	3.2	1.8	3.1
Bihar	3.5	2.5	3.4
Gujarat	2.6	2.0	2.4
Haryana	2.5	1.3	2.2
Himachal Pradesh	2.3	1.6	2.2
Jammu & Kashmir	2.0	1.2	1.8
Karnataka	2.4	1.9	2.2
Kerala	1.4	1.1	1.3
Madhya Pradesh	3.3	2.0	3.0
Maharashtra	2.1	1.6	1.9
Orissa	3.2	2.0	3.1
Punjab	2.5	1.6	2.3
Rajasthan	2.8	2.1	2.7
Tamil Nadu	3.6	2.0	3.1
Uttar Pradesh	3.5	2.5	3.2
West Bengal	2.5	1.6	2.2

4.20 The death rates in the age group 35-49 years are presented in Statement 45 for rural and urban areas. It is seen that the death rate for the age-group 35-49 years is 5.4 which is about double the death rate for the age-group 15-34 years. The male death rate in the age 35-49 years is found to be higher than female death rate for rural as well as urban areas.

STATEMENT - 45

Estimated death rates for age group 35-49
years by rural/urban and by sex,
India, 1987

Sector	Male	Female	Person
Rural	6.4	5.0	5.7
Urban	4.9	3.6	4.3
Total	6.0	4.7	5.4

4.21 Statement 46 gives the death rate in the age group 35-49 years by rural and urban for major states. The lowest death rate for the age-group 35-49 years is found to be 3.3 for Himachal Pradesh while the highest death rate is found to be 8.0 for ~~Assam~~

STATEMENT - 46

Estimated death rates for age-group
35-49 years by rural/urban,
major states, 1987

States	Rural	Urban	Total
Andhra Pradesh	5.6	5.3	5.6
Assam	8.1	6.1	8.0
Bihar	5.4	4.7	6.2
Gujarat	4.6	5.0	4.7
Haryana	4.4	5.7	4.7
Himachal Pradesh	3.2	4.4	3.3
Jammu & Kashmir	4.7	5.3	4.8
Karnataka	5.2	3.5	4.7
Kerala	3.7	2.9	3.5
Madhya Pradesh	4.9	3.8	4.7
Maharashtra	5.1	4.3	4.8
Orissa	6.6	3.9	6.3
Punjab	4.3	3.6	4.1
Rajasthan	5.0	2.9	4.6
Tamil Nadu	5.9	4.2	5.4
Uttar Pradesh	6.9	5.5	6.7
West Bengal	5.1	3.4	4.5

4.22 The estimated death rates for persons aged 50 years and above at the national level is presented in Statement 47 by sex and by rural and urban. Male death rate is higher than female death rate in respect of rural as well as urban areas. Also, the rural rates are higher than the urban death rates.

STATEMENT - 47

Estimated death rates for aged 50 years
and above by rural/urban and by sex,
India, 1987

Sector	Male	Female	Person
Rural	35.4	30.5	32.9
Urban	33.7	28.0	30.9
Total	35.0	30.0	32.5

4.23 Statement 48 gives the death rates in the age group 50 years and over for major states by rural and urban. Kerala (27.7) has the lowest and Bihar & Orissa (35.8) have the highest death rate.

Statement - 48
Estimated death rates for aged 50 years
and above by rural/urban,
major states, 1987

States	Rural	Urban	Total
Andhra Pradesh	34.0	35.0	34.2
Assam	38.5	33.0	31.1
Bihar	36.0	33.4	35.8
Gujarat	30.7	30.9	30.8
Haryana	28.8	27.2	28.4
Himachal Pradesh	32.7	24.3	32.2
Jammu & Kashmir	28.4	29.8	28.7
Karnataka	31.2	28.9	30.7
Kerala	27.2	29.7	27.7
Madhya Pradesh	33.5	29.9	32.9
Maharashtra	31.3	26.9	29.9
Orissa	36.2	31.5	35.8
Punjab	28.3	26.9	27.9
Rajasthan	33.1	26.4	31.8
Tamil Nadu	36.6	31.4	35.0
Uttar Pradesh	35.4	34.8	35.3
West Bengal	32.6	27.1	30.8

4.24 Information about type of medical attention received before death was recorded in respect of all deaths. Such information is classified as (i) institutional (ii) attended by qualified medical practitioners (iii) attended by unqualified medical practitioners, (iv) not attended by professional doctor/Hakim/Vaidya. From Statement 49, it is observed that the percentage of deaths under the category "attended by unqualified medical practitioners and others" is 55.5 at the national level. Institutional deaths comprise only 11.8 per cent of the total deaths, while deaths included under the category "attended by qualified medical practitioners" comprise 32.7 percent of total deaths. In respect of rural areas, institutional deaths comprise only 8.9 percent of the total deaths, as against 27.7 percent for urban areas.

STATEMENT - 49

Percent distribution of deaths by type
of medical attention received
before death, India, 1987

Sector	Institu- tional	Attended by quali- fied medical practitioners	Attended by unqualified medi- practitioners and others
Rurai	8.9	30.4	60.7
Urban	27.7	44.8	27.5
Total	11.8	32.7	55.5

4.25 Statement 50 gives the percentage of deaths in the rural areas classified by type of medical attention received before death. Among major states, Kerala has the highest percentage of institutional deaths in rural areas (31) followed by Maharashtra where the percentage of institutional deaths

is 21.1. In Orissa and Gujarat about four-fifth of the deaths is attended by untrained medical practitioners and others. The lowest percentage of deaths attended by untrained medical practitioners and others is recorded for Kerala (27.5). In a majority of states, over one-half of the deaths is attended by untrained medical practitioners and others.

STATEMENT - 50

Percent distribution of deaths by type of medical attention received before death for rural areas of major states, 1987

States	Insti- tutional	Attended by qualified medical practitioners	Attended by unqualified medical practitioners and others
Andhra Pradesh	13.7	15.8	70.5
Assam	5.3	45.2	49.5
Bihar	8.4	21.5	70.1
Gujarat	4.8	16.1	79.1
Haryana	7.4	42.1	50.5
Himachal Pradesh	7.0	58.5	34.5
Jammu & Kashmir	5.9	52.0	42.1
Karnataka	11.5	26.5	62.0
Kerala	30.8	41.7	27.5
Madhya Pradesh	5.2	21.4	73.4
Maharashtra	21.1	26.5	52.4
Orissa	7.1	14.6	78.3
Punjab	7.4	53.0	39.6
Rajasthan	6.4	24.0	69.6
Tamil Nadu	9.4	18.1	72.5
Uttar Pradesh	4.4	51.1	44.5
West Bengal	8.9	32.3	58.8

4.26 The per cent deaths in the urban areas classified by type of attention received before death is presented in statement 51. It is seen that the highest percentage of institutional deaths is found to be 49.4 for Maharashtra, closely followed by Kerala (44.3). The percentage of institutional deaths is the lowest in Uttar Pradesh. The percentage of deaths attended by unqualified medical practitioners and others are 5.2 per cent in Maharashtra and 7.8 per cent in Kerala. In Orissa over one-half of the deaths is attended by unqualified medical practitioners and others.

STATEMENT - 51

Percent distribution of deaths by type of medical attention received before death for urban areas of major states, 1987

States	Institutional	Attended by qualified medical practitioners	Attended by unqualified medical practitioners and others
Andhra Pradesh	28.1	43.5	28.4
Assam	17.5	55.9	26.6
Bihar	37.3	38.2	24.5
Gujarat	29.8	30.3	39.9
Haryana	14.3	44.9	40.8
Himachal Pradesh	27.6	56.6	15.8
Jammu & Kashmir	16.7	67.9	15.4
Karnataka	28.6	26.0	45.4
Kerala	44.3	47.9	7.8
Madhya Pradesh	24.1	39.3	36.6
Maharashtra	49.4	45.4	5.2
Orissa	21.8	22.9	55.3
Punjab	14.1	46.0	39.9
Rajasthan	19.3	42.9	37.8
Tamil Nadu	36.8	35.6	27.6
Uttar Pradesh	8.9	66.6	24.5
West Bengal	37.6	51.4	11.0

4.27 The percent deaths for all areas combined by type of medical attention received before death is presented in statement 52. The highest percentage of institutional deaths is recorded for Kerala and the lowest for Uttar Pradesh. In Orissa nearly three-fourth of the deaths is attended by unqualified medical practitioners and others closely followed by Gujarat.

STATEMENT - 52

Percent distribution of deaths by type of
medical attention received before death
for rural and urban combined,
major states, 1987

States	Institutional	Attended by qualified medical practitioners	Attended by unquali- fied medical practitioners and others
Andhra Pradesh	17.0	22.2	60.8
Assam	7.0	46.7	46.3
Bihar	10.8	22.9	66.3
Gujarat	7.9	17.9	74.2
Haryana	8.7	42.7	48.6
Himachal Pradesh	9.9	58.2	31.9
Jammu & Kashmir	8.3	55.6	36.1
Karnataka	14.8	26.4	58.8
Kerala	33.3	42.8	23.9
Madhya Pradesh	7.4	23.5	69.1
Maharashtra	27.0	30.4	42.6
Orissa	8.5	15.4	76.1
Punjab	9.1	51.2	39.7
Rajasthan	8.1	26.5	65.4
Tamil Nadu	14.5	21.3	64.2
Uttar Pradesh	5.0	53.2	41.8
West Bengal	13.2	35.1	51.7

D E T A I L E D T A B L E S

Percent distribution of estimated population
by age-group and sex, 1987

Age-group	INDIA								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	13.5	13.3	13.4	11.9	12.1	12.0	13.1	13.0	13.1
5-9	12.8	12.8	12.8	11.6	11.8	11.7	12.5	12.6	12.5
10-14	12.9	12.1	12.5	11.4	11.4	11.4	12.6	12.0	12.3
15-19	11.1	10.0	10.6	10.6	10.6	10.6	11.0	10.1	10.6
20-24	8.7	9.2	8.9	9.6	10.3	9.9	8.9	9.4	9.2
25-29	7.6	7.8	7.7	9.3	9.2	9.2	8.0	8.1	8.0
30-34	6.4	6.9	6.7	7.7	7.5	7.6	6.8	7.0	6.9
35-39	5.5	5.5	5.5	6.6	6.1	6.3	5.7	5.7	5.7
40-44	4.9	5.3	5.1	5.5	5.1	5.3	5.0	5.2	5.1
45-49	4.2	4.2	4.2	4.5	4.1	4.3	4.2	4.2	4.2
50-54	3.9	3.9	3.9	3.7	3.5	3.6	3.9	3.8	3.8
55-59	2.7	2.7	2.7	2.6	2.5	2.6	2.7	2.7	2.7
60-64	2.4	2.6	2.5	2.0	2.2	2.1	2.3	2.5	2.4
65-69	1.6	1.7	1.6	1.4	1.6	1.6	1.5	1.7	1.6
70 & over	1.8	2.0	1.9	1.6	2.0	1.8	1.8	2.0	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

Age-group	INDIA		
	Rural	Urban	Combined
	2	3	4
15-19	97.5	58.7	88.3
20-24	262.8	221.3	252.3
25-29	223.3	184.6	213.5
30-34	148.4	96.4	135.9
35-39	88.1	49.6	78.8
40-44	40.2	18.8	35.5
45-49	17.9	5.3	15.1
Crude birth rate	33.7	27.4	32.2
General fertility rate	141.8	108.5	133.8
Total fertility rate	4.4	3.2	4.1
Gross reproduction rate	2.1	1.5	2.0

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	INDIA		
	Rural	Urban	Combined
1	2	3	4
15-19	248.5	299.2	255.3
20-24	318.4	325.1	319.8
25-29	239.5	208.6	231.9
30-34	157.2	103.2	144.3
35-39	95.2	53.7	85.1
40-44	40.2	21.4	40.0
45-49	21.5	6.5	15.1
General marital fertility rate	179.6	152.5	173.6
Total marital fertility rate	5.6	5.1	5.5

TABLE 4

Mortality Indicators, 1987

Indicators	INDIA		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	12.0	7.4	10.9
Infant mortality rate	104	61	95
Neo-natal mortality rate	63.6	33.3	57.7
Post ^{neo} -natal mortality rate	40.5	27.3	37.7
Peri-natal mortality rate	54.4	32.4	50.1
Still birth rate	13.6	9.8	12.9

TABLE 5

Estimated age-specific death rates
by sex, 1987

INDIA

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	37.8	41.8	39.7	18.1	18.2	18.2	33.6	36.8	35.2
5-9	3.3	4.4	3.8	1.3	1.9	1.6	2.8	3.9	3.3
10-14	1.6	1.6	1.6	1.1	0.9	1.0	1.5	1.4	1.5
15-19	2.2	2.7	2.4	1.2	1.8	1.5	1.9	2.5	2.2
20-24	2.5	3.7	3.1	1.6	2.1	1.9	2.3	3.3	2.8
25-29	2.4	3.5	3.0	1.8	2.0	1.9	2.2	3.1	2.7
30-34	3.3	3.6	3.5	2.6	2.1	2.3	3.1	3.3	3.2
35-39	4.1	3.9	4.0	3.1	2.7	2.9	3.9	3.6	3.7
40-44	6.5	4.8	5.7	5.3	3.1	4.3	6.2	4.4	5.3
45-49	9.3	6.5	7.9	7.0	5.7	6.4	8.7	6.3	7.6
50-54	13.8	10.4	12.1	12.5	8.6	10.7	13.5	10.0	11.8
55-59	20.5	15.8	18.2	19.8	13.1	16.7	20.3	15.2	17.9
60-64	35.8	27.3	31.5	31.9	23.2	27.5	35.0	26.5	30.7
65-69	46.9	38.5	42.6	47.9	34.4	41.0	47.1	37.6	42.3
70 & over	93.4	86.0	89.6	97.0	81.2	88.5	94.2	84.9	89.4
All ages	11.9	12.1	12.0	7.7	7.1	7.4	10.9	11.0	10.9

TABLE 6

Percent distribution of sample births by
type of medical attention at birth, 1987

INDIA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	14.7	17.8	49.7	17.8
Urban	48.7	25.5	18.1	7.7
Combined	21.2	19.3	43.6	15.9

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by
type of medical attention received before death, 1987

INDIA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	8.9	30.4	23.1	37.6
Urban	27.7	44.8	6.7	20.8
Combined	11.8	32.7	20.5	35.0

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

ANDHRA PRADESH									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	11.8	11.8	11.8	12.5	12.3	12.4	11.9	11.9	11.9
5-9	12.5	12.4	12.5	12.6	12.5	12.6	12.5	12.4	12.5
10-14	12.5	11.9	12.2	11.6	11.4	11.5	12.4	11.8	12.1
15-19	10.5	9.5	10.0	10.4	10.9	10.7	10.5	9.8	10.1
20-24	8.4	9.0	8.7	9.3	10.2	9.7	8.6	9.3	8.9
25-29	7.7	7.6	7.7	9.2	9.1	9.1	8.0	7.9	8.0
30-34	6.8	7.1	7.0	7.9	7.0	7.4	7.1	7.1	7.1
35-39	5.7	5.5	5.6	6.4	5.8	6.1	5.9	5.6	5.7
40-44	5.5	5.9	5.7	5.3	5.2	5.2	5.4	5.7	5.6
45-49	4.7	4.5	4.6	4.5	4.1	4.3	4.7	4.4	4.6
50-54	4.5	4.7	4.6	3.7	3.6	3.7	4.3	4.4	4.4
55-59	2.9	3.0	2.9	2.4	2.5	2.5	2.8	2.9	2.8
60-64	2.9	3.2	3.0	1.9	2.2	2.1	2.6	3.0	2.8
65-69	1.7	1.7	1.7	1.1	1.5	1.3	1.6	1.7	1.6
70 & over	1.9	2.2	2.0	1.2	1.7	1.4	1.7	2.1	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

ANDHRA PRADESH			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	151.4	99.4	138.9
20-24	253.5	221.5	245.9
25-29	176.5	160.9	172.7
30-34	96.4	79.4	92.7
35-39	58.3	40.5	54.3
40-44	19.0	13.0	17.8
45-49	9.1	1.6	7.6
Crude birth rate	30.9	28.2	30.3
General fertility rate	126.7	108.4	122.6
Total fertility rate	3.8	3.1	3.6
Gross reproduction rate	1.8	1.5	1.8

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	ANDHRA PRADESH		
	Rural	Urban	Combined
	1	2	3
15-19†	314.7	314.9	314.7
20-24	291.8	291.2	291.6
25-29	189.4	175.5	186.1
30-34	103.9	85.1	99.9
35-39	64.4	44.7	60.0
40-44	22.1	15.5	20.9
45-49	11.4	2.0	9.6
General marital fertility rate	156.6	146.0	154.4
Total marital fertility rate	5.0	4.6	4.9

TABLE 4

Mortality Indicators, 1987

Indicators	ANDHRA PRADESH		
	Rural	Urban	Combined
	1	2	3
Crude death rate	10.7	7.3	9.9
Infant mortality rate	84	58	79
Neo-natal mortality rate	59.5	35.0	54.6
Post _{neo} /natal mortality rate	25.3	22.6	24.7
Peri-natal mortality rate	54.3	35.3	50.5
Still birth rate	9.4	12.2	10.0

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	ANDHRA PRADESH								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	32.2	27.5	29.9	18.9	15.0	17.0	29.2	24.8	27.0
5-9	2.2	3.5	2.9	1.7	0.9	1.3	2.1	2.9	2.5
10-14	1.4	1.7	1.6	1.1	0.8	1.0	1.4	1.5	1.5
15-19	2.4	2.0	2.2	1.0	2.1	1.6	2.1	2.0	2.1
20-24	3.4	3.5	3.4	2.2	1.1	1.6	3.1	2.9	3.0
25-29	2.6	2.9	2.7	1.5	1.5	1.5	2.3	2.5	2.4
30-34	3.3	4.4	3.9	2.9	1.7	2.3	3.2	3.9	3.5
35-39	3.3	4.2	3.7	5.6	2.7	4.2	3.8	3.9	3.9
40-44	6.7	5.2	5.9	6.3	2.0	4.2	6.6	4.5	5.5
45-49	8.7	6.6	7.7	9.6	6.6	8.2	8.9	6.6	7.8
50-54	14.2	10.6	12.4	17.4	7.6	12.6	14.8	10.1	12.4
55-59	18.5	15.4	17.1	23.2	12.6	17.8	19.4	14.9	17.1
60-64	37.1	28.9	32.8	43.2	22.4	32.1	38.0	27.9	32.7
65-69	45.4	35.7	40.5	53.4	46.3	49.3	46.6	37.7	42.1
70 & over	98.5	92.8	95.4	104.0	76.9	87.8	112.9	90.1	94.2
All ages	11.0	10.3	10.7	8.3	6.3	7.3	10.4	9.4	9.9

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

ANDHRA PRADESH				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	15.0	21.5	50.5	13.0
Urban	66.8	12.1	14.0	7.1
Combined	30.0	18.8	39.9	11.3

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

ANDHRA PRADESH				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	13.7	15.8	26.1	44.4
Urban	28.1	43.5	1.5	26.9
Combined	17.0	22.2	20.4	40.4

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/valdya attended.

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987

Age-group	ASSAM								
	Male	Rural		Urban			Combined		
		Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	13.9	14.1	14.0	10.0	10.5	10.2	13.6	13.9	13.7
5-9	12.6	13.1	12.8	10.2	10.7	10.4	12.4	12.9	12.7
10-14	11.6	11.7	11.7	9.6	10.9	9.8	11.4	11.6	11.5
15-19	11.8	12.4	12.1	10.0	11.2	10.6	11.7	12.3	12.0
20-24	10.3	11.6	10.9	10.5	12.4	11.4	10.3	11.7	11.0
25-29	8.6	8.5	8.5	9.8	10.9	10.3	8.6	8.7	8.7
30-34	6.6	6.2	6.4	9.1	8.1	8.6	6.7	6.4	6.5
35-39	5.7	5.4	5.5	7.8	6.2	7.0	5.8	5.4	5.6
40-44	4.5	4.5	4.5	5.9	5.0	5.5	4.6	4.5	4.6
45-49	4.3	3.9	4.1	5.1	4.3	4.8	4.4	3.9	4.1
50-54	3.3	2.9	3.1	3.9	3.5	3.7	3.4	2.9	3.1
55-59	2.6	2.2	2.4	3.0	2.5	2.8	2.7	2.2	2.5
60-64	1.8	1.5	1.7	2.2	1.7	2.0	1.9	1.5	1.7
65-69	1.2	1.0	1.1	1.3	1.4	1.4	1.2	1.0	1.1
70 & over	1.3	1.0	1.2	1.6	1.6	1.5	1.3	1.1	1.2
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2
Estimated age-specific fertility rates
and other fertility indicators, 1987

Age-group	ASSAM		
	Rural	Urban	Combined
	2	3	4
15-19	84.3	44.6	81.7
20-24	225.2	162.7	220.4
25-29	209.8	165.8	206.8
30-34	149.4	97.8	145.7
35-39	105.3	41.7	100.7
40-44	45.5	10.7	42.7
45-49	2.0	1.1	2.0
Crude birth rate	34.9	25.7	34.2
General fertility rate	136.3	93.4	132.9
Total fertility rate	4.1	2.6	4.0
Gross reproduction rate	1.9	1.2	1.9

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	ASSAM		
	Rural	Urban	Combined
1	2	3	4
15-19	378.4	433.1	380.1
20-24	381.9	392.4	382.5
25-29	270.3	246.2	268.3
30-34	170.4	123.5	166.4
35-39	119.6	48.4	113.9
40-44	54.6	13.1	51.3
45-49	2.8	1.4	2.6
General marital fertility rate	216.7	166.4	213.0
Total marital fertility rate	7.0	6.3	6.8

TABLE 4

Mortality Indicators, 1987

Indicators	ASSAM		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	11.9	8.1	11.6
Infant mortality rate	104	69	102
Neo-natal mortality rate	75.9	49.2	74.0
Post ^{neo} -natal mortality rate	28.9	20.2	28.4
Peri-natal mortality rate	69.8	49.6	68.7
Still birth rate	17.1	9.7	16.7

TABLE 5

Estimated age-specific death rates
by sex, 1987

ASSAM

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	35.0	39.2	37.1	19.7	24.1	21.8	34.1	38.4	36.2
5-9	4.2	4.1	4.1	2.5	2.0	2.3	4.1	3.9	4.0
10-14	1.4	1.2	1.3	0.6	1.1	0.8	1.4	1.2	1.3
15-19	1.8	2.6	2.2	1.5	3.8	2.7	1.8	2.7	2.3
20-24	2.8	4.0	3.4	0.8	1.6	1.2	2.6	3.8	3.2
25-29	2.5	5.2	3.8	1.3	1.1	1.2	2.4	4.8	3.5
30-34	2.9	5.0	3.9	2.8	1.5	2.2	2.9	4.7	3.7
35-39	6.2	5.1	5.7	3.2	2.0	2.7	5.9	4.8	5.4
40-44	9.4	5.8	7.7	6.1	5.1	5.6	9.1	5.8	7.5
45-49	12.6	11.1	11.9	11.9	11.6	11.8	12.6	11.1	11.9
50-54	19.2	16.9	18.1	14.0	8.9	11.8	18.7	16.2	17.6
55-59	26.0	21.3	24.0	24.2	17.7	21.4	25.9	21.0	23.7
60-64	45.1	35.4	40.9	30.7	39.1	34.3	43.8	35.7	40.3
65-69	55.6	43.2	50.2	55.8	42.4	49.4	55.6	43.1	50.1
70 & over	112.7	106.0	109.8	90.4	88.7	89.5	110.8	104.1	107.8
All ages	12.0	11.7	11.9	8.1	8.0	8.1	11.7	11.5	11.6

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

ASSAM				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	10.7	8.0	5.7	75.6
Urban	46.7	14.3	11.0	28.0
Combined	16.2	9.0	6.5	68.3

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

ASSAM				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	5.3	45.2	6.0	43.5
Urban	17.5	55.9	3.1	23.5
Combined	7.0	46.7	5.6	40.7

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

Percent distribution of estimated population
by age-group, and sex, 1987

Age-group	BIHAR								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.8	14.6	14.7	13.0	13.7	13.4	14.6	14.5	14.5
5-9	13.8	14.0	13.9	13.7	14.7	14.2	13.8	14.1	13.9
10-14	14.1	12.8	13.5	13.4	13.6	13.4	14.0	12.9	13.5
15-19	10.5	8.5	9.6	10.9	10.4	10.6	10.6	8.7	9.7
20-24	7.6	8.0	7.8	8.9	8.1	8.6	7.8	8.0	7.9
25-29	6.8	7.4	7.1	7.3	7.5	7.4	6.8	7.3	7.1
30-34	6.2	6.9	6.5	6.8	7.3	7.0	6.3	6.9	6.6
35-39	5.3	5.8	5.5	6.2	6.1	6.1	5.4	5.8	5.7
40-44	4.9	5.1	5.0	5.6	5.2	5.5	4.9	5.2	5.0
45-49	4.0	4.1	4.0	4.5	3.8	4.2	4.0	4.0	4.0
50-54	3.5	3.5	3.5	3.5	3.0	3.3	3.5	3.4	3.5
55-59	2.5	2.7	2.6	2.2	2.0	2.1	2.5	2.6	2.5
60-64	2.3	2.6	2.4	1.7	1.8	1.7	2.2	2.5	2.4
65-69	1.8	2.0	1.9	1.1	1.3	1.2	1.7	2.0	1.8
70 & over	1.9	2.0	2.0	1.2	1.5	1.3	1.9	2.0	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

Age-group	BIHAR		
	Rural	Urban	Combined
1	2	3	4
15-19	110.0	69.1	105.4
20-24	256.9	260.2	257.2
25-29	260.6	237.8	258.6
30-34	204.2	143.5	198.2
35-39	140.3	89.9	135.3
40-44	72.7	43.1	69.8
45-49	43.3	5.3	40.0
Crude birth rate	37.3	30.1	36.6
General fertility rate	167.9	133.4	164.4
Total fertility rate	5.4	4.2	5.3
Gross reproduction rate	2.6	2.1	2.5

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	BIHAR		
	Rural	Urban	Combined
1	2	3	4
15-19	210.3	258.0	213.2
20-24	281.9	339.9	286.7
25-29	269.8	256.8	268.6
30-34	212.9	149.9	206.6
35-39	149.3	95.3	143.8
40-44	80.0	47.7	76.8
45-49	50.9	6.3	47.0
General marital fertility rate	196.8	176.3	195.0
Total marital fertility rate	6.3	5.8	6.2

TABLE 4

Mortality Indicators, 1987

Indicators	BIHAR		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	13.6	8.0	13.1
Infant mortality rate	104	72	101
Neo-natal mortality rate	61.8	39.8	60.0
Post ^{neo} -natal mortality rate	42.1	32.1	41.3
Peri-natal mortality rate	49.4	29.1	46.9
Still birth rate	11.9	5.1	11.4

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	BIHAR								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	40.4	43.3	41.8	20.9	22.3	20.4	38.6	41.4	40.0
5-9	4.4	5.9	5.1	1.9	1.8	1.9	4.1	5.5	4.8
10-14	2.1	2.0	2.1	0.9	1.2	1.1	2.0	2.0	2.0
15-19	2.8	3.4	3.1	1.3	1.6	1.4	2.7	3.2	2.9
20-24	2.7	5.2	3.9	1.4	4.5	2.8	2.6	5.1	3.8
25-29	3.2	3.3	3.2	1.2	4.4	2.7	3.0	3.5	3.2
30-34	2.9	4.4	3.6	3.0	3.6	3.3	2.9	4.3	3.6
35-39	3.9	5.4	4.6	1.4	3.7	2.5	3.6	5.2	4.4
40-44	5.9	6.3	6.1	4.6	3.7	4.2	5.7	6.1	5.9
45-49	9.8	8.4	9.1	9.6	7.1	8.5	9.8	8.3	9.1
50-54	12.5	12.2	12.3	9.0	13.4	10.9	12.2	12.4	12.3
55-59	21.7	18.3	20.0	18.4	19.9	19.0	21.5	18.5	20.0
60-64	30.0	28.2	29.0	35.9	27.9	32.0	30.6	28.3	29.4
65-69	48.9	39.2	43.9	50.4	49.9	50.1	49.2	40.1	44.5
70 & over	94.8	102.5	98.6	99.6	97.5	98.5	95.1	102.2	98.6
All ages	13.0	14.1	13.6	7.5	8.8	8.0	12.5	13.7	13.1

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TABLE 6

Percent distribution of sample births by
type of medical attention at birth, 1987

BIHAR				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	9.2	11.5	76.4	2.9
Urban	26.6	26.1	39.7	7.6
Combined	11.1	13.1	72.4	3.4

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by
type of medical attention received before death, 1987

BIHAR				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	8.4	21.5	33.2	36.9
Urban	37.3	38.2	4.4	20.1
Combined	10.8	22.9	30.8	35.5

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/valdya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

GUJARAT

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	12.0	11.9	11.9	13.0	12.8	12.9	12.3	12.1	12.2
5-9	12.6	12.4	12.5	11.8	11.6	11.7	12.3	12.2	12.2
10-14	12.7	12.1	12.4	11.2	10.9	11.1	12.3	11.8	12.0
15-19	11.7	10.5	11.1	10.5	9.6	10.1	11.3	10.2	10.8
20-24	9.9	10.5	10.2	10.0	11.0	10.5	9.9	10.7	10.3
25-29	8.4	8.4	8.4	9.8	9.0	9.4	8.8	8.6	8.7
30-34	6.7	6.9	6.8	7.7	7.7	7.7	7.0	7.1	7.0
35-39	5.6	5.4	5.5	6.2	5.7	6.0	5.8	5.5	5.6
40-44	4.7	5.2	5.0	5.0	5.1	5.0	4.8	5.1	5.0
45-49	4.3	4.3	4.3	4.2	4.3	4.2	4.3	4.3	4.3
50-54	3.7	3.7	3.7	3.5	3.5	3.5	3.7	3.7	3.7
55-59	2.6	2.5	2.5	2.6	2.7	2.6	2.6	2.5	2.6
60-64	2.1	2.5	2.3	1.8	2.1	2.0	2.0	2.4	2.2
65-69	1.3	1.6	1.5	1.2	1.8	1.5	1.3	1.7	1.5
70 & over	1.7	2.1	1.9	1.5	2.2	1.8	1.6	2.1	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

GUJARAT

Age-group	Rural	Urban	Combined
	2	3	4
15-19	40.4	37.4	39.6
20-24	272.1	248.5	264.7
25-29	222.4	202.9	216.2
30-34	124.7	96.5	115.4
35-39	60.1	36.9	52.8
40-44	24.4	15.2	21.6
45-49	6.7	3.8	5.8
Crude birth rate	31.6	29.0	30.8
General fertility rate	126.8	114.2	122.9
Total fertility rate	3.8	3.2	3.6
Gross reproduction rate	1.8	1.5	1.7

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	GUJARAT		
	Rural	Urban	Combined
1	2	3	4
15-19	141.8	200.1	153.8
20-24	360.7	335.9	353.0
25-29	245.3	219.7	237.0
30-34	131.1	104.0	115.4
35-39	63.5	40.5	56.4
40-44	26.4	17.3	23.8
45-49	7.5	4.6	6.7
General marital fertility rate	167.5	154.8	163.6
Total marital fertility rate	4.9	4.6	4.7

TABLE 4

Mortality Indicators, 1987

Indicators	GUJARAT		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	10.8	7.6	9.8
Infant mortality rate	113	59	97
Neo-natal mortality rate	67.1	28.3	56.0
Post ^{neo} -natal mortality rate	45.8	31.0	41.5
Peri-natal mortality rate	57.5	29.9	49.6
Still birth rate	7.8	8.7	8.1

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	GUJARAT								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	38.0	44.1	40.9	16.4	18.0	17.2	31.1	35.7	33.3
5-9	3.6	3.5	3.5	1.6	2.8	2.2	3.0	3.3	3.1
10-14	1.2	1.2	1.2	0.7	0.7	0.7	1.1	1.1	1.1
15-19	1.2	1.6	1.4	1.8	2.0	1.9	1.4	1.8	1.5
20-24	2.8	3.9	3.3	1.1	2.9	2.0	2.3	3.6	2.9
25-29	2.3	3.5	2.9	1.2	2.7	1.9	1.9	3.3	2.6
30-34	3.0	3.1	3.1	2.4	2.1	2.3	2.8	2.8	2.8
35-39	3.8	4.1	3.9	3.6	2.2	3.0	3.7	3.5	3.6
40-44	4.1	3.4	3.8	5.3	4.0	4.6	4.5	3.6	4.0
45-49	8.2	4.5	6.4	10.8	5.7	8.3	9.0	4.9	7.0
50-54	14.7	8.5	11.6	20.3	7.9	14.3	16.3	8.3	12.4
55-59	18.4	15.1	16.8	35.1	9.0	22.2	23.5	13.2	18.5
60-64	32.6	25.1	28.7	25.6	22.1	23.8	30.7	24.3	27.3
65-69	50.1	36.3	42.7	55.8	28.3	39.8	51.7	33.7	41.8
70 & over	81.5	79.5	80.4	83.3	69.6	75.3	82.0	76.5	78.9
All ages	10.5	11.1	10.8	7.9	7.2	7.6	9.7	9.9	9.8

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

GUJARAT				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	15.5	34.5	26.7	23.3
Urban	57.6	13.5	12.4	16.5
Combined	21.9	31.3	24.5	22.3

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

GUJARAT

Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	4.8	16.1	16.1	63.0
Urban	29.8	30.3	18.5	21.4
Combined	7.9	17.9	16.3	57.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

HARYANA									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.3	14.5	14.4	13.7	13.8	13.7	14.2	14.4	14.3
5-9	13.0	13.0	13.0	11.9	12.2	12.0	12.8	12.8	12.8
10-14	13.1	12.4	12.8	12.0	11.1	11.6	12.9	12.1	12.5
15-19	12.5	11.5	12.0	10.3	10.5	10.4	12.0	11.3	11.7
20-24	9.7	9.9	9.8	9.7	11.4	10.5	9.7	10.2	9.9
25-29	7.9	8.0	8.0	10.0	9.2	9.6	8.4	8.2	8.3
30-34	6.2	6.8	6.4	8.0	7.3	7.6	6.6	6.9	6.7
35-39	4.9	5.0	5.0	5.3	5.1	5.3	5.0	5.1	5.0
40-44	4.2	4.6	4.4	4.7	4.6	4.6	4.3	4.6	4.4
45-49	3.3	3.3	3.3	3.6	3.5	3.6	3.3	3.3	3.4
50-54	3.1	3.6	3.3	3.2	3.2	3.2	3.1	3.5	3.3
55-59	2.3	2.4	2.3	2.3	2.5	2.4	2.3	2.4	2.4
60-64	2.3	2.3	2.3	1.8	2.0	1.9	2.2	2.2	2.2
65-69	1.4	1.3	1.4	1.5	1.6	1.6	1.4	1.4	1.4
70 & over	1.8	1.4	1.6	2.0	2.0	2.0	1.8	1.6	1.7
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

HARYANA			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	86.5	43.7	77.5
20-24	318.9	273.4	307.4
25-29	249.0	213.3	240.0
30-34	137.5	114.9	132.1
35-39	74.8	41.3	67.1
40-44	25.3	20.3	24.2
45-49	14.3	7.8	12.7
Crude birth rate	35.4	31.3	34.5
General fertility rate	154.9	129.8	149.0
Total fertility rate	4.5	3.6	4.3
Gross reproduction rate	2.1	1.8	2.0

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

HARYANA			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	238.9	273.9	242.6
20-24	347.0	361.3	350.2
25-29	253.9	226.2	247.2
30-34	140.4	119.0	135.3
35-39	77.7	43.2	69.9
40-44	27.1	22.1	26.0
45-49	16.0	8.9	14.3
General marital fertility rate	191.0	175.3	187.6
Total marital fertility rate	5.5	5.3	5.4

TABLE 4

Mortality Indicators, 1987

HARYANA			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	9.4	6.9	8.8
Infant mortality rate	93	61	87
Neo-natal mortality rate	51.3	24.0	45.7
Post ^{neo} natal mortality rate	41.9	37.4	41.0
Peri-natal mortality rate	54.9	22.9	48.3
Still birth rate	17.4	8.7	15.6

TABLE 5

Estimated age-specific death rates
by sex, 1987

HARYANA									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	30.4	31.7	31.0	13.4	22.4	17.6	26.7	29.7	28.1
5-9	1.0	2.7	1.8	2.0	0.9	1.5	1.2	2.3	1.7
10-14	0.4	0.9	0.6	0.8	0.9	0.9	0.5	0.9	0.7
15-19	1.6	2.0	1.8	0.0	2.1	1.0	1.3	2.0	1.6
20-24	1.9	4.2	3.0	0.9	2.3	1.6	1.7	3.7	2.6
25-29	2.4	3.2	2.8	0.9	1.7	1.2	2.0	2.8	2.4
30-34	3.6	1.9	2.8	1.7	0.7	1.3	3.1	1.7	2.4
35-39	4.6	1.4	3.1	4.2	3.2	3.7	4.5	1.8	3.2
40-44	6.6	1.9	4.3	7.8	2.3	5.2	6.9	2.0	4.5
45-49	6.0	7.0	6.4	10.0	8.6	9.4	7.0	7.4	7.1
50-54	8.5	8.2	8.3	10.1	9.9	10.0	8.9	8.6	8.7
55-59	12.8	14.9	13.8	13.9	^{10.4} 12.2	^{12.2} 13.1	13.1	13.9	13.4
60-64	24.2	23.4	23.9	15.7	29.0	22.3	22.7	24.6	23.6
65-69	35.8	39.2	37.3	24.2	22.7	23.5	33.0	35.0	33.9
70 & over	94.5	85.9	91.0	92.1	66.9	80.0	94.0	80.3	88.1
All ages	9.4	9.4	9.4	6.5	7.4	6.9	8.7	9.0	8.8

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

HARYANA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	15.9	64.6	17.0	2.5
Urban	20.6	60.0	17.0	2.4
Combined	16.9	63.6	17.0	2.5

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

HARYANA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	7.4	42.1	2.9	47.6
Urban	14.3	44.9	2.0	38.8
Combined	8.7	42.7	2.7	45.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/valdya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

HIMACHAL PRADESH

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.3	13.0	13.6	9.6	10.7	10.1	13.9	12.8	13.4
5-9	13.3	11.8	12.5	10.4	11.9	11.1	13.1	11.8	12.4
10-14	13.1	12.0	12.5	9.7	11.3	10.4	12.8	11.9	12.4
15-19	12.0	11.0	11.5	9.9	9.4	9.7	11.8	10.9	11.3
20-24	7.6	9.6	8.6	9.3	10.0	9.6	7.8	9.6	8.7
25-29	6.8	8.2	7.5	9.0	10.7	9.7	7.0	8.4	7.7
30-34	5.2	6.3	5.7	9.4	9.1	9.2	5.5	6.5	6.0
35-39	4.8	5.8	5.3	7.8	6.4	7.2	5.0	5.8	5.4
40-44	4.1	4.8	4.5	6.7	5.4	6.1	4.3	4.9	4.6
45-49	3.9	4.3	4.1	5.5	3.7	4.7	4.0	4.3	4.2
50-54	3.7	3.8	3.8	4.4	3.4	4.0	3.7	3.8	3.8
55-59	3.3	2.8	3.1	2.8	2.7	2.8	3.3	2.8	3.0
60-64	2.7	2.2	2.5	2.3	1.9	2.1	2.7	2.2	2.4
65-69	2.2	2.0	2.1	1.3	1.5	1.4	2.2	2.0	2.1
70 & over	3.0	2.4	2.7	1.9	1.9	1.9	2.9	2.3	2.6
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

HIMACHAL PRADESH

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	55.5	26.6	53.9
20-24	279.9	216.1	292.6
25-29	202.4	177.5	200.4
30-34	109.5	57.2	104.8
35-39	44.2	27.2	43.0
40-44	16.9	3.0	16.0
45-49	12.2	0.0	11.5
Crude birth rate	31.4	22.7	30.8
General fertility rate	124.2	91.8	121.9
Total fertility rate	3.7	2.5	3.6
Gross reproduction rate	1.8	1.2	1.7

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

HIMACHAL PRADESH			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	266.3	327.2	267.6
20-24	363.6	388.9	364.8
25-29	210.3	207.6	210.1
30-34	114.7	60.3	109.9
35-39	47.9	28.8	46.5
40-44	18.9	3.3	17.8
45-49	14.3	-	13.6
General marital fertility rate	166.0	131.6	163.8
Total marital fertility rate	5.2	5.1	5.2

TABLE 4

Mortality Indicators, 1987

HIMACHAL PRADESH			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	8.7	5.3	8.5
Infant mortality rate	84	44	82
Neo-natal mortality rate	39.1	21.2	38.1
Post ^{neo} -natal mortality rate	45.2	23.2	44.1
Peri-natal mortality rate	41.0	15.0	39.7
Still birth rate	17.2	6.4	16.6

TABLE 5

Estimated age-specific death rates
by sex, 1987

HIMACHAL PRADESH

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	20.8	25.4	23.0	11.5	8.3	10.0	20.3	24.5	22.3
5-9	1.0	1.2	1.1	0.0	0.0	0.0	1.0	1.2	1.1
10-14	1.4	3.2	2.2	0.0	0.0	0.0	1.3	3.0	2.1
15-19	0.9	2.8	1.8	1.2	4.5	2.7	0.9	2.9	1.8
20-24	0.4	4.6	2.8	1.3	0.0	0.7	0.5	4.3	2.6
25-29	2.6	1.4	1.9	1.5	1.3	1.4	2.5	1.4	1.9
30-34	3.9	2.5	3.2	2.7	0.0	1.5	3.8	2.3	3.0
35-39	1.2	2.5	1.9	2.8	1.9	2.4	1.4	2.4	1.9
40-44	3.5	1.7	2.5	6.1	3.0	4.9	3.8	1.8	2.7
45-49	4.6	6.6	5.6	8.2	4.3	6.8	4.9	6.4	5.7
50-54	10.4	6.3	8.3	8.9	0.0	5.4	10.2	6.0	8.1
55-59	20.1	11.6	16.2	0.0	10.4	4.6	18.8	11.6	15.5
60-64	36.0	17.9	27.7	21.1	33.1	26.0	35.0	18.7	27.6
65-69	27.2	37.3	32.0	60.8	10.9	36.9	28.8	36.0	32.2
70 & over	79.8	53.5	68.0	97.6	59.9	80.8	80.7	53.8	68.6
All ages	9.2	8.3	8.7	6.4	4.1	5.3	9.0	8.0	8.5

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

HIMACHAL PRADESH				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	21.9	12.6	62.9	2.6
Urban	47.2	35.1	15.8	1.9
Combined	26.1	16.4	55.0	2.5

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

HIMACHAL PRADESH				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	7.0	58.5	2.3	32.2
Urban	27.6	56.6	-	15.8
Combined	9.9	58.2	2.0	29.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987

Age-group	JAMMU & KASHMIR								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.6	14.9	14.7	10.9	11.7	11.2	13.8	14.2	14.0
5-9	11.8	12.3	12.0	10.2	10.1	10.2	11.4	11.8	11.6
10-14	13.3	13.1	13.2	12.0	12.4	12.2	13.0	13.0	13.0
15-19	11.7	11.6	11.7	12.0	12.1	12.1	11.8	11.7	11.8
20-24	9.3	9.3	9.3	10.8	11.3	11.1	9.6	9.7	9.7
25-29	6.8	7.4	7.1	9.5	8.6	9.1	7.4	7.7	7.5
30-34	6.4	6.6	6.5	7.7	7.2	7.5	6.6	6.7	6.7
35-39	5.0	5.3	5.2	5.6	5.4	5.5	5.1	5.3	5.2
40-44	5.1	5.2	5.1	5.2	5.6	5.3	5.1	5.3	5.1
45-49	4.0	3.7	3.9	4.3	4.3	4.3	4.1	3.8	4.0
50-54	3.8	3.6	3.7	3.9	4.1	4.0	3.8	3.7	3.8
55-59	2.6	2.2	2.4	2.9	2.6	2.7	2.7	2.3	2.5
60-64	2.1	1.9	2.0	1.9	1.6	1.8	2.1	1.8	1.9
65-69	1.5	1.2	1.4	1.6	1.5	1.5	1.6	1.3	1.4
70 & over	2.0	1.7	1.8	1.5	1.5	1.5	1.9	1.7	1.8
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2
Estimated age-specific fertility rates
and other fertility indicators, 1987

Age-group	JAMMU & KASHMIR		
	Rural	Urban	Combined
	2	3	4
15-19	61.4	40.8	57.0
20-24	233.3	175.4	219.1
25-29	227.9	184.2	217.6
30-34	190.7	112.2	173.1
35-39	101.7	45.7	89.9
40-44	51.2	16.9	43.6
45-49	28.6	12.4	24.7
Crude birth rate	32.6	25.1	31.0
General fertility rate	137.3	96.6	128.1
Total fertility rate	4.5	2.9	4.1
Gross reproduction rate	2.1	1.3	2.0

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

JAMMU & KASHMIR			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	306.5	403.4	318.3
20-24	333.5	382.4	342.1
25-29	242.2	224.9	238.5
30-34	197.7	119.4	180.5
35-39	106.8	48.6	94.6
40-44	55.9	18.7	47.7
45-49	33.2	14.5	28.7
General marital fertility rate	191.8	154.8	184.3
Total marital fertility rate	6.4	6.1	6.2

TABLE 4

Mortality Indicators, 1987

JAMMU & KASHMIR			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	8.0	6.4	7.7
Infant mortality rate	77	47	71
Neo-natal mortality rate	45.0	25.0	41.6
Post ^{neo} -natal mortality rate	31.5	21.8	29.8
Peri-natal mortality rate	61.8	38.6	57.8
Still birth rate	34.2	22.7	32.3

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	JAMMU & KASHMIR								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	25.0	17.4	21.3	15.4	12.9	14.2	23.4	16.6	20.1
5-9	1.7	1.1	1.4	0.6	0.0	0.3	1.5	0.9	1.2
10-14	0.9	1.2	1.1	0.5	0.5	0.5	0.8	1.1	0.9
15-19	2.1	1.1	1.6	1.2	0.0	0.6	1.9	0.9	1.4
20-24	2.4	2.2	2.3	1.0	1.4	1.2	2.0	2.0	2.0
25-29	0.9	2.5	1.7	1.6	0.7	1.2	1.1	2.1	1.6
30-34	2.4	2.8	2.6	3.2	0.8	2.1	2.6	2.4	2.5
35-39	2.6	2.1	2.3	4.6	3.0	3.8	3.1	2.3	2.7
40-44	5.6	3.8	4.7	4.0	5.9	4.9	5.3	4.2	4.8
45-49	9.2	5.9	7.7	8.4	6.5	7.5	9.0	6.0	7.6
50-54	12.7	11.9	12.3	13.1	6.9	10.1	12.8	10.7	11.8
55-59	23.9	10.8	18.2	16.4	14.7	15.8	22.2	11.8	17.6
60-64	28.6	15.9	22.9	38.9	21.1	31.2	30.6	16.9	24.5
65-69	54.0	23.9	41.6	64.3	44.8	55.0	56.2	29.3	44.8
70 & over	70.9	68.4	69.8	100.0	57.5	80.0	76.0	66.3	71.6
All ages	9.4	6.5	8.0	7.5	5.2	6.4	9.0	6.3	7.7

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

JAMMU & KASHMIR				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	6.9	15.9	76.1	1.1
Urban	27.6	37.2	32.8	2.4
Combined	11.5	20.6	66.5	1.4

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

JAMMU & KASHMIR				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	5.9	52.0	28.0	14.1
Urban	16.7	67.9	10.3	5.1
Combined	8.3	55.6	24.0	12.1

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

KARNATAKA

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	12.7	12.7	12.7	12.0	11.8	11.9	12.5	12.5	12.5
5-9	12.7	12.7	12.7	12.4	12.1	12.3	12.7	12.5	12.6
10-14	13.1	12.8	13.0	11.9	12.0	12.0	12.8	12.6	12.7
15-19	11.0	10.4	10.7	10.5	11.1	10.8	10.8	10.6	10.7
20-24	9.2	9.7	9.5	9.8	10.9	10.3	9.3	10.0	9.7
25-29	7.5	7.4	7.4	9.1	9.5	9.3	7.9	8.0	8.0
30-34	6.6	7.3	6.9	8.0	7.4	7.7	7.0	7.3	7.1
35-39	5.3	5.2	5.2	6.6	5.7	6.1	5.6	5.3	5.5
40-44	5.4	5.4	5.4	5.1	4.7	4.9	5.3	5.2	5.2
45-49	4.1	3.7	3.9	4.0	3.5	3.8	4.1	3.7	3.9
50-54	4.1	4.0	4.1	3.4	3.4	3.4	3.9	3.8	3.9
55-59	2.4	2.3	2.4	2.3	2.3	2.3	2.4	2.3	2.3
60-64	2.6	2.7	2.6	1.9	2.2	2.0	2.4	2.6	2.4
65-69	1.4	1.6	1.5	1.3	1.4	1.4	1.4	1.5	1.5
70 & over	1.9	2.2	2.0	1.7	2.0	1.8	1.9	2.1	2.0
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

KARNATAKA

Age-group	Rural	Urban	Combined
	2	3	4
5-19	97.4	63.6	87.9
20-24	239.2	203.4	228.7
25-29	190.6	161.0	181.1
30-34	111.3	86.8	104.6
35-39	58.6	42.0	53.8
40-44	25.9	11.8	22.5
45-49	10.3	3.4	8.5
Crude birth rate	29.9	26.3	28.9
General fertility rate	122.9	102.3	117.1
Infant mortality rate	3.7	2.9	3.0

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	KARNATAKA		
	Rural	Urban	Combined
1	2	3	4
15-19	290.6	348.3	300.8
20-24	310.8	317.7	312.6
25-29	211.5	187.4	204.1
30-34	121.4	95.5	114.4
35-39	65.6	46.6	60.1
40-44	30.7	13.9	26.6
45-49	13.4	4.4	11.2
General marital fertility rate	166.0	151.5	162.1
Total marital fertility rate	5.2	5.1	5.2

TABLE 4

Mortality Indicators, 1987

Indicators	KARNATAKA		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	9.7	6.1	8.7
Infant mortality rate	86	41	75
Neo-natal mortality rate	61.8	27.5	53.3
Post ^{neo} -natal mortality rate	24.2	13.1	21.5
Peri-natal mortality rate	64.6	33.9	57.0
Still birth rate	19.3	14.3	18.1

TABLE 5

Estimated age-specific death rates
by sex, 1987

KARNATAKA

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	29.2	30.0	29.6	11.6	12.9	12.2	24.6	25.6	25.1
5-9	1.9	2.2	2.1	0.9	1.6	1.2	1.6	2.1	1.8
10-14	1.2	1.1	1.2	0.8	0.7	0.7	1.1	1.0	1.1
15-19	1.4	2.6	2.0	1.4	1.9	1.6	1.4	2.4	1.9
20-24	2.2	2.8	2.5	1.1	1.8	1.5	1.9	2.5	2.2
25-29	1.7	3.4	2.5	1.5	2.0	1.7	1.6	2.9	2.3
30-34	2.2	2.9	2.5	3.5	2.4	3.0	2.6	2.7	2.7
35-39	4.5	3.3	3.9	2.3	2.5	2.4	3.8	3.1	3.5
40-44	5.7	4.3	5.0	4.6	2.5	3.6	5.4	3.9	4.6
45-49	9.3	4.6	7.1	5.5	5.0	5.3	8.3	4.7	6.6
50-54	14.6	7.8	11.3	14.9	5.0	10.1	14.7	7.1	11.0
55-59	25.9	12.4	19.5	23.4	5.9	14.8	25.3	10.7	18.2
60-64	30.0	23.9	26.9	33.4	17.8	25.3	30.7	22.4	26.5
65-69	44.6	32.0	38.1	48.1	33.2	40.5	45.4	32.3	38.7
70 & over	90.1	80.3	85.0	76.7	75.8	76.2	86.8	79.2	82.8
All ages	10.0	9.3	9.7	6.4	5.7	6.1	9.0	8.3	8.7

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

KARNATAKA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	19.3	29.8	17.7	33.2
Urban	58.8	16.5	5.6	19.1
Combined	29.1	26.5	14.7	29.7

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

KARNATAKA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	11.5	26.5	9.6	52.4
Urban	28.6	26.0	4.7	40.7
Combined	14.8	26.4	8.7	50.1

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

KERALA									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	11.2	10.1	10.6	10.9	10.2	10.6	11.1	10.1	10.6
5-9	11.0	10.0	10.5	10.0	9.2	9.6	10.9	9.9	10.4
10-14	11.4	10.4	10.9	10.5	9.6	10.0	11.2	10.3	10.7
15-19	11.6	11.4	11.5	11.1	11.1	11.1	11.6	11.3	11.5
20-24	10.2	11.4	10.8	10.6	11.3	10.9	10.3	11.3	10.8
25-29	8.6	9.2	8.9	9.3	9.8	9.5	8.7	9.3	9.0
30-34	7.0	7.2	7.1	7.5	7.8	7.6	7.1	7.4	7.2
35-39	5.8	5.8	5.8	6.7	6.2	6.5	6.0	5.9	6.0
40-44	4.7	4.9	4.8	5.0	4.9	5.0	4.7	4.9	4.8
45-49	4.1	4.2	4.2	4.3	4.4	4.4	4.2	4.2	4.2
50-54	3.9	4.1	4.0	3.9	4.1	4.0	3.9	4.1	3.9
55-59	3.1	3.2	3.2	3.3	3.3	3.3	3.1	3.2	3.2
60-64	2.7	2.7	2.7	2.6	2.6	2.6	2.7	2.7	2.7
65-69	2.1	2.2	2.1	1.9	2.3	2.1	2.0	2.2	2.1
70 & over	2.6	3.2	2.9	2.4	3.2	2.8	2.5	3.2	2.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

KERALA			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	31.5	38.2	32.7
20-24	172.1	170.3	171.8
25-29	139.0	141.1	139.4
30-34	54.7	54.7	54.7
35-39	24.7	30.5	25.8
40-44	7.2	4.4	6.7
45-49	2.0	-	1.7
Crude birth rate	21.5	22.3	21.7
General fertility rate	77.2	78.5	77.4
Total fertility rate	2.2	2.2	2.2
Gross reproduction rate	1.0	1.1	1.1

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	KERALA		
	Rural	Urban	Combined
1	2	3	4
15-19	284.4	369.7	298.5
20-24	329.4	333.0	330.0
25-29	172.3	177.9	173.3
30-34	62.6	62.7	62.6
35-39	28.7	34.9	29.8
40-44	8.7	5.4	8.1
45-49	2.7	-	2.2
General marital fertility rate	125.6	127.8	126.0
Total marital fertility rate	4.4	4.9	4.5

TABLE 4

Mortality Indicators, 1987

Indicators	KERALA		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	6.1	6.2	6.1
Infant mortality rate	29	25	28
Neo-natal mortality rate	20.0	16.1	19.3
Post ^{neo} -natal mortality rate	8.5	8.8	8.6
Peri-natal mortality rate	24.8	25.2	24.9
Still birth rate	10.7	12.8	11.1

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	KERALA								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	8.4	7.0	7.7	6.3	8.7	7.5	8.0	7.3	7.6
5-9	1.1	0.9	1.0	1.1	1.1	1.1	1.1	0.9	1.0
10-14	0.5	0.5	0.5	0.7	1.0	0.8	0.5	0.6	0.6
15-19	1.0	0.5	0.8	1.3	0.3	0.8	1.1	0.5	0.8
20-24	1.0	1.6	1.3	0.7	0.6	0.6	1.0	1.4	1.2
25-29	1.5	1.1	1.3	0.8	1.0	0.9	1.4	1.1	1.2
30-34	3.9	1.3	2.5	2.8	1.7	2.2	3.7	1.4	2.5
35-39	3.5	1.3	2.4	0.5	1.1	0.8	2.9	1.3	2.1
40-44	4.6	1.7	3.1	4.2	2.1	3.1	4.6	1.8	3.1
45-49	9.6	2.8	6.1	9.8	2.2	5.9	9.7	2.7	6.1
50-54	10.0	3.6	6.6	15.8	9.1	12.3	11.0	4.6	7.6
55-59	13.5	8.3	10.8	20.4	6.2	13.1	14.8	7.9	11.2
60-64	18.3	10.2	14.0	27.6	14.0	20.6	19.9	10.8	15.2
65-69	39.5	23.7	31.1	48.8	22.6	34.2	41.0	23.5	31.6
70 & over	92.8	76.6	83.4	82.1	77.6	79.5	90.5	76.8	82.9
All ages	7.0	5.2	6.1	6.9	5.6	6.2	7.0	5.3	6.1

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

KERALA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	77.3	8.1	9.2	5.4
Urban	86.0	9.9	3.0	1.1
Combined	79.0	8.4	8.0	4.6

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

KERALA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	30.8	41.7	6.4	21.1
Urban	44.3	47.9	2.8	5.0
Combined	33.3	42.8	5.7	18.2

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987

MADHYA PRADESH									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	13.9	14.0	13.9	13.2	13.6	13.4	13.7	13.9	13.8
5-9	13.4	13.7	13.5	11.9	12.7	12.3	13.1	13.5	13.3
10-14	13.0	12.2	12.6	12.0	11.8	11.9	12.8	12.1	12.5
15-19	11.1	9.3	10.2	11.4	10.8	11.1	11.1	9.6	10.4
20-24	8.5	9.0	8.8	9.6	10.2	9.9	8.7	9.3	9.0
25-29	7.8	7.7	7.7	9.1	8.6	8.9	8.1	7.9	8.0
30-34	6.3	6.7	6.5	7.1	7.1	7.1	6.4	6.8	6.6
35-39	5.4	5.2	5.3	6.1	5.6	5.8	5.6	5.2	5.4
40-44	4.6	5.2	4.9	4.9	4.6	4.8	4.6	5.1	4.9
45-49	4.0	4.3	4.2	4.2	3.9	4.1	4.1	4.2	4.2
50-54	4.0	3.8	3.9	3.6	3.3	3.4	3.9	3.7	3.8
55-59	2.6	2.6	2.6	2.4	2.3	2.3	2.6	2.5	2.6
60-64	2.5	2.7	2.6	1.8	2.1	2.0	2.3	2.6	2.4
65-69	1.3	1.6	1.5	1.3	1.5	1.4	1.3	1.6	1.4
70 & over	1.6	2.0	1.8	1.4	1.9	1.7	1.6	2.0	1.7
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2
Estimated age-specific fertility rates
and other fertility indicators, 1987

MADHYA PRADESH			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	147.0	75.7	131.4
20-24	304.3	253.9	293.4
25-29	244.2	224.1	239.9
30-34	156.5	113.2	147.6
35-39	86.6	60.6	81.2
40-44	40.3	23.8	37.4
45-49	14.0	18.6	14.8
Crude birth rate	37.5	31.9	36.4
General fertility rate	163.6	131.0	156.9
Total fertility rate	5.0	3.8	4.7
Gross reproduction rate	2.4	1.9	2.3

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

MADHYA PRADESH			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	240.0	273.0	243.8
20-24	321.9	324.3	322.4
25-29	253.0	239.3	250.1
30-34	163.8	117.6	154.2
35-39	92.1	64.0	86.2
40-44	44.7	26.0	41.3
45-49	16.5	21.9	17.5
General marital fertility rate	188.0	171.7	185.0
Total marital fertility rate	5.7	5.3	5.6

TABLE 4

Mortality Indicators. 1987

MADHYA PRADESH			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	14.6	8.0	13.3
Infant mortality rate	128	81	120
Neo-natal mortality rate	71.7	38.7	66.0
Post ^{neo} -natal mortality rate	56.8	41.9	54.2
Peri-natal mortality rate	55.3	35.1	51.8
Still birth rate	13.0	9.7	12.4

TABLE 5

Estimated age-specific death rates
by sex, 1987

MADHYA PRADESH									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	54.0	56.9	55.4	25.3	23.5	24.4	48.5	50.5	49.5
5-9	4.3	6.1	5.2	1.1	1.1	1.1	3.7	5.2	4.5
10-14	2.2	1.8	2.0	0.0	2.0	1.0	1.8	1.8	1.8
15-19	3.3	3.7	3.5	1.4	2.9	2.1	2.9	3.5	3.2
20-24	2.0	4.4	3.2	1.6	2.7	2.1	1.9	4.0	2.9
25-29	2.3	3.6	2.9	1.7	2.8	2.2	2.2	3.4	2.7
30-34	3.9	3.5	3.7	1.3	1.4	1.4	3.3	3.1	3.2
35-39	4.5	3.0	3.8	2.6	5.0	3.7	4.1	3.4	3.7
40-44	6.5	3.4	4.9	5.8	0.7	3.4	6.4	2.9	4.6
45-49	8.4	4.4	6.4	4.3	4.4	4.4	7.6	4.4	6.0
50-54	13.9	12.4	13.2	12.5	9.2	11.0	13.6	11.8	12.7
55-59	19.1	13.3	16.3	13.2	20.6	16.7	18.0	14.6	16.3
60-64	39.4	34.8	37.0	29.4	28.2	28.8	37.8	33.7	35.6
65-69	48.2	48.7	48.5	56.8	41.9	49.2	49.8	47.4	48.4
70 & over	84.2	90.1	87.4	82.5	65.4	73.1	83.9	85.4	84.7
All ages	14.2	15.0	14.6	7.9	8.2	8.0	12.9	13.7	13.3

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

MADHYA PRADESH				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	2.7	11.1	66.7	19.5
Urban	47.6	14.2	27.7	10.5
Combined	10.5	11.6	59.9	18.0

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

MADHYA PRADESH				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	5.2	21.4	38.2	35.2
Urban	24.1	39.3	15.6	21.0
Combined	7.4	23.5	35.5	33.6

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/ vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

MAHARASHTRA									
Age-groups	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	13.4	12.9	13.2	11.6	12.1	11.8	12.7	12.6	12.7
5-9	11.9	11.9	11.9	11.3	11.7	11.5	11.7	11.8	11.7
10-14	12.2	11.6	11.9	11.2	11.1	11.2	11.8	11.4	11.6
15-19	11.1	10.4	10.7	10.2	10.3	10.2	10.8	10.4	10.6
20-24	8.6	8.8	8.7	9.9	10.2	10.0	9.1	9.3	9.2
25-29	7.4	7.4	7.4	9.8	9.4	9.6	8.3	8.1	8.2
30-34	6.2	6.7	6.5	7.6	7.7	7.7	6.8	7.1	6.9
35-39	5.7	5.6	5.7	7.2	6.7	6.9	6.2	6.0	6.1
40-44	5.0	5.4	5.2	5.6	5.2	5.4	5.2	5.4	5.3
45-49	4.5	4.9	4.7	4.7	4.3	4.5	4.6	4.7	4.6
50-54	4.4	4.2	4.3	3.8	3.5	3.7	4.2	4.0	4.1
55-59	3.3	3.1	3.2	2.7	2.4	2.6	3.1	2.9	3.0
60-64	2.6	2.8	2.7	1.9	2.1	2.0	2.3	2.5	2.4
65-69	1.8	2.0	1.9	1.3	1.5	1.4	1.6	1.8	1.7
70 & over	1.9	2.3	2.0	1.2	1.8	1.5	1.6	2.1	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

MAHARASHTRA			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	109.0	66.9	94.5
20-24	276.8	244.8	264.6
25-29	200.8	178.0	191.6
30-34	104.5	69.9	91.3
35-39	37.2	26.3	33.0
40-44	13.8	8.0	11.8
45-49	6.6	4.4	5.9
Crude birth rate	30.2	26.6	28.9
General fertility rate	123.2	104.6	116.4
Total fertility rate	3.7	3.0	3.5
Gross reproduction rate	1.8	1.4	1.6

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

MAHARASHTRA			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	241.4	310.7	255.4
20-24	320.3	353.8	333.4
25-29	213.1	203.2	203.3
30-34	110.6	75.2	97.3
35-39	40.4	28.7	35.9
40-44	15.4	9.2	13.3
45-49	7.9	5.4	7.1
General marital fertility rate	152.6	144.6	149.9
Total marital fertility rate	4.8	4.9	4.8

TABLE 4

Mortality Indicators, 1987

MAHARASHTRA			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	9.5	6.1	8.3
Infant mortality rate	76	47	66
Neo-natal mortality rate	56.2	30.0	47.5
Post ^{neo} -natal mortality rate	19.6	17.3	18.9
Peri-natal mortality rate	54.0	32.9	47.0
Still birth rate	15.4	10.0	13.6

TABLE 5

Estimated age-specific death rates
by sex, 1987

MAHARASHTRA

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	25.0	24.8	24.9	16.0	11.3	13.7	22.0	20.3	21.1
5-9	2.1	2.1	2.1	0.8	1.0	0.9	1.6	1.7	1.7
10-14	1.3	0.4	0.9	0.6	1.1	0.8	1.0	0.6	0.9
15-19	1.6	2.3	1.9	1.3	1.0	1.1	1.4	1.8	1.6
20-24	2.0	2.3	2.1	0.9	2.2	1.5	1.5	2.3	1.9
25-29	1.8	2.7	2.2	2.6	0.8	1.8	2.1	1.9	2.0
30-34	2.9	1.9	2.4	3.1	1.3	2.2	3.0	1.6	2.3
35-39	4.1	2.8	3.5	2.9	1.7	2.4	3.6	2.4	3.0
40-44	7.5	5.1	6.3	6.0	3.8	5.0	6.9	4.7	5.8
45-49	6.5	5.4	6.0	6.6	6.5	6.5	6.5	5.8	6.2
50-54	11.2	8.1	9.7	7.7	7.5	7.6	10.0	7.9	9.0
55-59	17.9	15.8	16.9	17.7	10.3	14.5	17.8	14.2	16.1
60-64	34.0	18.7	26.0	34.2	21.5	27.9	34.1	19.5	26.6
65-69	49.6	33.2	40.9	55.3	30.7	42.8	51.3	32.5	41.5
70 & over	104.9	90.7	97.1	82.3	76.7	79.1	98.6	86.5	91.9
All ages	10.1	9.1	9.6	6.7	5.5	6.1	8.8	7.8	8.3

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

MAHARASHTRA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	20.8	10.4	42.0	26.8
Urban	73.2	18.8	7.7	0.3
Combined	34.5	12.7	33.0	19.8

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

MAHARASHTRA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	21.1	26.5	15.3	37.1
Urban	49.4	45.4	1.7	3.5
Combined	27.0	30.4	12.5	30.1

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

ORISSA

Age-group :	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	13.0	12.3	12.6	11.5	12.3	11.9	12.8	12.3	12.5
5-9	12.0	11.8	11.9	11.3	11.9	11.6	11.9	11.9	11.9
10-14	13.0	12.3	12.7	12.3	12.3	12.3	12.9	12.3	12.6
15-19	10.9	11.2	11.1	11.1	11.5	11.3	10.9	11.3	11.1
20-24	8.6	9.7	9.2	9.4	9.9	9.7	8.7	9.8	9.2
25-29	8.2	8.1	8.2	8.3	9.0	8.6	8.3	8.2	8.3
30-34	6.7	6.4	6.5	7.5	7.9	7.7	6.8	6.5	6.6
35-39	5.7	5.7	5.7	6.6	5.8	6.2	5.8	5.7	5.7
40-44	5.0	5.2	5.1	6.1	5.0	5.5	5.1	5.1	5.1
45-49	4.4	4.6	4.5	4.6	3.7	4.2	4.4	4.5	4.5
50-54	4.0	3.9	3.9	4.0	3.2	3.6	4.0	3.8	3.9
55-59	3.0	2.8	2.9	2.7	2.3	2.5	3.0	2.7	2.9
60-64	2.4	2.5	2.4	1.7	1.8	1.7	2.3	2.4	2.4
65-69	1.3	1.5	1.4	1.2	1.5	1.4	1.3	1.5	1.4
70 & Over	1.8	2.0	1.9	1.7	1.9	1.8	1.8	2.0	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

ORISSA

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	82.5	55.7	80.0
20-24	239.7	211.9	237.1
25-29	215.1	155.9	209.1
30-34	125.3	99.2	122.4
35-39	62.8	57.5	62.3
40-44	19.2	21.2	19.4
45-49	9.1	9.2	8.8
Gross birth rate	31.6	25.7	31.0
General fertility rate	123.8	101.9	121.7
Total fertility rate	3.8	3.0	3.7
Gross reproduction rate	1.9	1.5	1.8

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	ORISSA		
	Rural	Urban	Combined
1	2	3	4
15-19	271.3	318.8	274.0
20-24	301.7	332.3	304.1
25-29	227.7	173.1	222.5
30-34	132.6	105.2	129.5
35-39	67.4	60.5	66.8
40-44	21.9	23.1	22.0
45-49	11.2	6.3	10.9
General marital fertility rate	164.2	145.6	162.5
Total marital fertility rate	5.2	5.1	5.2

TABLE 4

Mortality Indicators, 1987

Indicators	ORISSA		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	13.7	7.8	13.1
Infant mortality rate	131	75	126
Neo-natal mortality rate	90.1	40.7	86.2
Post ^{Neo} -natal mortality rate	40.8	34.3	40.3
Peri-natal mortality rate	75.5	46.7	73.2
Still birth rate	21.8	21.4	21.8

TABLE 5

Estimated age-specific death rates
by sex, 1967

Age-group	ORISSA								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	47.5	52.9	50.1	19.2	25.5	22.3	44.9	50.4	47.6
5-9	3.7	4.5	4.1	2.6	0.9	1.8	3.6	4.2	3.9
10-14	1.6	1.5	1.6	0.9	1.1	1.0	1.5	1.5	1.5
15-19	1.6	3.5	2.6	0.9	3.1	2.0	1.6	3.5	2.5
20-24	2.3	3.9	3.1	1.7	2.3	2.0	2.2	3.8	3.0
25-29	2.8	3.3	3.0	1.4	1.7	1.3	2.6	3.1	2.8
30-34	5.1	4.0	4.6	3.8	1.7	2.8	5.0	3.7	4.4
35-39	5.5	3.8	4.6	1.7	4.0	2.7	5.1	3.8	4.4
40-44	8.7	4.8	6.7	1.7	1.1	1.5	7.8	4.5	6.2
45-49	8.8	8.8	8.8	12.2	4.6	9.0	9.2	8.5	8.8
50-54	14.8	12.3	13.6	8.8	11.3	9.9	14.2	12.2	13.2
55-59	16.8	21.2	18.9	3.9	25.1	13.1	15.6	21.5	18.4
60-64	35.1	34.4	34.8	48.7	12.8	30.8	36.1	32.9	34.5
65-69	48.9	48.8	48.9	47.4	52.4	50.1	48.9	49.2	49.0
70 & over	106.5	95.5	100.8	100.2	75.9	87.8	105.9	93.7	99.6
All ages	13.4	13.9	13.7	7.7	8.1	7.8	12.8	13.3	13.1

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

ORISSA				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	3.6	13.8	28.7	53.9
Urban	30.4	23.0	21.8	24.8
Combined	7.2	15.0	27.8	50.0

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

ORISSA				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	7.1	14.6	12.9	65.4
Urban	21.8	22.9	5.5	49.8
Combined	8.5	15.4	12.2	63.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-groups and sex, 1987

PUNJAB

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
	1	2	3	4	5	6	7	8	9
0-4	11.8	11.7	11.7	11.0	11.7	11.3	11.5	11.7	11.6
5-9	11.7	11.4	11.5	10.8	10.7	10.8	11.4	11.2	11.4
10-14	11.1	10.8	11.0	10.2	9.9	10.0	10.9	10.6	10.8
15-19	10.7	10.4	10.5	9.7	8.9	9.3	10.4	10.0	10.2
20-24	9.9	10.4	10.1	10.0	11.1	10.5	9.9	10.6	10.2
25-29	8.5	8.2	8.4	9.5	9.5	9.5	8.8	8.6	8.7
30-34	6.6	7.3	6.9	8.3	8.0	8.2	7.0	7.5	7.2
35-39	5.6	5.9	5.7	6.5	5.9	6.2	5.8	5.9	5.8
40-44	5.1	5.2	5.2	5.6	5.3	5.5	5.3	5.2	5.2
45-49	4.3	4.2	4.2	4.7	4.7	4.7	4.4	4.3	4.4
50-54	3.8	3.7	3.8	4.1	4.0	4.1	3.9	3.8	3.8
55-59	3.1	3.1	3.1	3.0	3.1	3.0	3.1	3.1	3.1
60-64	2.9	2.8	3.0	2.6	2.7	2.7	2.8	2.8	2.8
65-69	2.2	2.2	2.2	2.0	2.2	2.1	2.2	2.2	2.2
70 & Over	2.7	2.7	2.7	2.0	2.3	2.1	2.6	2.5	2.6
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	21.8	24.3	22.4
20-24	244.6	232.3	241.2
25-29	233.2	220.3	229.5
30-34	126.8	94.0	117.6
35-39	53.1	45.4	51.0
40-44	19.6	5.3	15.8
45-49	8.8	1.9	6.8
Crude birth rate	28.9	27.9	28.7
General fertility rate	117.7	111.3	115.9
Total fertility rate	3.5	3.1	3.4
Gross reproduction rate	1.6	1.5	1.6

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

PUNJAB			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	233.4	243.5	235.9
20-24	369.8	362.2	367.8
25-29	252.2	243.9	249.8
30-34	131.7	97.6	122.1
35-39	55.8	46.9	53.4
40-44	21.0	5.6	16.9
45-49	9.6	2.1	7.5
General marital fertility rate	165.1	151.8	161.4
Total marital fertility rate	5.4	5.0	5.3

TABLE 4

Mortality Indicators, 1987

PUNJAB			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	8.5	7.1	8.1
Infant mortality rate	52	63	62
Neo-natal mortality rate	30.8	36.4	32.3
Post ^{neo} -natal mortality rate	31.3	26.9	30.2
Peri-natal mortality rate	47.2	38.1	44.8
Still birth rate	26.3	16.3	23.7

TABLE 5

Estimated age-specific death rates
by sex, 1967

Age-group	PUNJAB								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	19.1	23.5	24.5	18.9	17.3	18.1	19.1	21.9	20.4
5-9	1.8	1.3	1.5	0.0	0.0	0.0	1.3	1.0	1.1
10-14	1.1	1.3	1.2	0.4	1.0	0.7	0.9	1.2	1.1
15-19	2.2	2.1	2.1	0.9	2.2	1.5	1.8	2.1	2.0
20-24	3.4	1.4	2.5	3.8	1.7	2.8	3.5	1.5	2.5
25-29	2.0	3.0	2.5	1.3	0.0	0.7	1.8	2.1	2.0
30-34	3.4	3.0	3.2	1.2	1.3	1.2	2.7	2.5	2.6
35-39	5.5	1.6	3.6	2.8	1.7	2.3	4.7	1.6	3.2
40-44	7.3	2.2	4.9	5.0	2.8	4.0	6.7	2.4	4.6
45-49	5.6	3.4	4.6	7.5	2.3	5.1	6.1	3.1	4.7
50-54	7.4	11.0	9.1	2.4	8.6	5.2	6.0	10.3	8.0
55-59	14.2	8.9	11.7	11.3	14.8	13.0	13.5	10.4	12.0
60-64	29.0	19.1	24.3	23.3	9.5	16.7	27.6	16.7	22.4
65-69	28.4	25.3	27.0	37.3	12.8	25.2	20.6	22.0	26.5
70 & over	88.7	68.9	79.4	109.2	95.4	102.4	93.0	75.0	84.8
All ages	9.1	7.8	8.5	7.6	6.5	7.1	8.7	7.5	8.1

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

PUNJAB				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	6.7	67.0	22.6	3.7
Urban	9.4	82.0	3.4	5.2
Combined	7.5	71.3	17.0	4.2

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

PUNJAB				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	7.4	53.0	3.0	36.6
Urban	14.1	46.0	1.0	38.9
Combined	9.1	51.2	2.5	37.2

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	RAJASTHAN		
	Rural	Urban	Combined
1	2	3	4
15-19	188.0	219.3	191.9
20-24	304.4	332.6	308.8
25-29	253.0	217.7	246.0
30-34	175.5	129.3	167.0
35-39	111.3	64.7	101.7
40-44	55.3	30.0	50.6
45-49	28.4	12.2	25.3
General marital fertility rate	187.1	163.4	182.9
Total marital fertility rate	5.6	5.0	5.5

TABLE 4

Mortality Indicators, 1987

Indicators	RAJASTHAN		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	12.5	7.8	11.6
Infant mortality rate	108	69	102
Neo-natal mortality rate	65.2	40.5	61.3
Post-natal mortality rate	42.9	28.3	40.6
Peri-natal mortality rate	54.7	37.2	52.0
Still birth rate	9.5	6.7	9.0

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987

RAJASTHAN									
Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
	2	3	4	5	6	7	8	9	10
0-4	15.1	15.0	15.0	13.9	13.7	13.8	14.8	14.8	14.8
5	14.0	14.3	14.1	12.7	13.4	12.9	13.3	14.0	13.9
10-14	13.6	12.6	13.1	12.5	11.9	12.3	13.4	12.5	13.0
15-19	11.4	9.6	10.5	11.2	10.5	10.9	11.4	9.7	10.6
20-24	8.6	9.0	8.8	9.2	8.9	9.0	8.7	9.0	8.8
25-29	7.6	7.6	7.6	8.5	8.6	8.6	7.8	7.8	7.8
30-34	6.5	7.0	6.7	7.0	7.0	7.0	6.6	7.0	6.8
35-39	5.1	5.0	5.1	5.7	5.7	5.7	5.2	5.1	5.2
40-44	4.5	4.8	4.6	4.8	4.7	4.7	4.5	4.8	4.6
45-49	3.6	3.7	3.7	3.8	3.8	3.8	3.7	3.7	3.7
50-54	3.5	3.5	3.5	3.3	3.4	3.3	3.5	3.5	3.5
55-59	2.0	2.5	2.3	2.4	2.5	2.5	2.1	2.5	2.3
60-64	2.1	2.4	2.3	1.8	2.2	2.0	2.1	2.4	2.2
65-69	1.1	1.4	1.3	1.5	1.8	1.6	1.1	1.5	1.3
70 & over	1.3	1.6	1.4	1.6	2.2	1.9	1.3	1.7	1.5
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2
Estimated age-specific fertility rates
and other fertility indicators, 1987

RAJASTHAN			
Age-group	Rural	Urban	Combined
1.	2	3	4
15-19	110.1	73.7	102.9
20-24	292.9	267.3	288.3
25-29	248.2	207.9	240.0
30-34	169.8	124.3	161.4
35-39	104.7	61.7	95.9
40-44	50.3	27.6	46.2
45-49	24.7	10.5	21.9
Crude birth rate	36.3	29.8	35.1
General fertility rate	163.5	128.3	156.7
Total fertility rate	5.0	3.9	4.8
Gross reproduction rate	2.4	1.7	2.2

TABLE 5

Estimated age-specific death rates
by sex, 1907

Age-group	RAJASTHAN								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	38.6	49.0	43.9	22.3	25.8	24.0	35.8	45.6	40.5
5-9	2.6	4.6	3.6	0.8	2.3	1.6	2.3	4.2	3.2
10-14	1.8	1.8	1.8	1.4	1.0	1.2	1.8	1.6	1.7
15-19	1.6	2.4	1.9	0.9	3.3	2.0	1.5	2.5	1.9
20-24	2.9	3.1	3.0	1.0	2.2	1.6	2.6	2.9	2.7
25-29	2.6	3.7	3.1	0.7	0.9	0.8	2.2	3.1	2.7
30-34	3.9	3.5	3.7	5.6	3.7	4.7	4.3	3.5	3.9
35-39	3.8	4.3	4.0	2.8	1.4	2.1	3.6	3.7	3.6
40-44	6.5	2.7	4.6	4.7	3.9	4.3	6.1	2.9	4.6
45-49	7.5	6.1	6.8	1.8	3.0	2.4	6.4	5.5	6.0
50-54	17.4	8.9	13.3	7.6	7.2	7.4	15.7	8.6	12.3
55-59	25.5	13.5	19.2	12.4	11.8	12.1	22.7	11.4	17.8
60-64	40.0	28.3	34.1	23.6	15.0	19.1	37.4	26.0	31.6
65-69	54.0	33.3	42.6	22.4	46.1	35.1	46.6	36.2	40.9
70 & over	109.1	81.6	94.5	105.3	56.8	78.3	108.3	75.6	90.7
All ages	12.1	13.0	12.5	7.5	8.2	7.8	11.2	12.1	11.7

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

RAJASTHAN				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	1.5	9.8	80.9	7.8
Urban	17.0	29.9	42.0	11.1
Combined	4.1	13.1	74.4	8.4

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

RAJASTHAN				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	6.4	24.0	30.0	39.6
Urban	19.3	42.9	11.1	26.7
Combined	8.1	26.5	27.5	37.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987

TAMIL NADU

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	11.0	10.7	10.8	10.8	10.4	10.6	10.9	10.6	10.7
5-9	11.3	11.1	11.3	11.1	10.7	10.9	11.3	11.0	11.1
10-14	11.2	10.8	11.0	10.6	10.7	10.7	11.1	10.8	10.9
15-19	10.4	10.0	10.1	10.5	10.5	10.5	10.4	10.2	10.3
20-24	9.0	10.0	9.5	9.5	11.5	10.5	9.2	10.5	9.9
25-29	8.1	8.0	8.1	9.7	9.7	9.7	8.6	8.6	8.6
30-34	6.9	7.2	7.0	8.1	7.4	7.7	7.3	7.2	7.3
35-39	6.1	6.2	6.2	6.9	6.3	6.6	6.4	6.2	6.3
40-44	5.6	6.3	5.9	5.7	5.5	5.6	5.6	6.0	5.8
45-49	5.4	5.0	5.2	4.8	4.3	4.5	5.2	4.7	5.0
50-54	4.7	4.6	4.7	3.8	4.0	3.9	4.4	4.4	4.4
55-59	3.6	3.3	3.4	2.9	2.8	2.9	3.3	3.1	3.2
60-64	2.9	2.9	2.9	2.4	2.6	2.5	2.8	2.8	2.8
65-69	1.9	1.9	1.9	1.5	1.8	1.6	1.7	1.9	1.8
70 & Over	1.9	2.0	2.0	1.7	1.8	1.8	1.8	2.0	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

TAMIL NADU

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	68.5	56.4	64.2
20-24	213.6	189.2	204.6
25-29	152.0	148.9	150.8
30-34	75.5	61.7	70.7
35-39	30.5	19.3	26.7
40-44	8.9	3.1	7.2
45-49	3.3	2.1	3.0
Crude birth rate	24.1	23.7	24.0
General fertility rate	92.1	87.2	90.4
Total fertility rate	2.8	2.4	2.6
Gross reproduction rate	1.3	1.2	1.3

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	TAMIL NADU		
	Rural	Urban	Combined
1	2	3	4
15-19	326.3	372.1	339.2
20-24	305.3	291.3	300.3
25-29	171.8	170.0	171.1
30-34	81.7	66.0	76.2
35-39	34.0	21.0	29.5
40-44	10.4	3.7	8.3
45-49	4.2	2.8	3.7
General marital fertility rate	128.3	125.8	127.5
Total marital fertility rate	4.7	4.6	4.6

TABLE 4

Mortality Indicators, 1987

Indicators	TAMIL NADU		
	Rural	Urban	Combined
1	2	3	4
Crude death rate	11.1	7.6	9.9
Infant mortality rate	86	54	76
Neo-natal mortality rate	55.3	32.3	47.6
Post ^{neo} -natal mortality rate	31.1	22.0	28.0
Peri-natal mortality rate	56.8	40.2	51.2
Still birth rate	13.2	13.8	13.4

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	TAMIL NADU								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	25.9	26.2	26.0	15.9	19.2	17.5	22.5	23.9	23.2
5-9	3.5	2.6	3.1	1.7	1.2	1.5	2.9	2.2	2.6
10-14	1.6	1.3	1.5	0.9	1.3	1.1	1.4	1.3	1.3
15-19	2.8	3.0	2.9	1.2	2.3	1.8	2.3	2.8	2.5
20-24	3.9	4.2	4.0	2.9	2.4	2.6	3.6	3.5	3.5
25-29	3.7	4.6	4.2	1.8	1.6	1.7	3.0	3.5	3.2
30-34	4.6	2.5	3.5	2.2	1.8	2.0	3.7	2.2	3.0
35-39	4.8	4.2	4.5	3.2	2.9	3.0	4.2	3.7	4.0
40-44	5.2	4.9	5.0	5.7	2.0	3.9	5.4	4.0	4.7
45-49	10.2	7.1	8.7	7.2	5.6	6.4	9.3	6.6	8.0
50-54	16.6	11.0	13.9	13.2	10.4	11.8	15.6	10.8	13.2
55-59	21.7	16.2	19.1	21.5	17.1	19.4	21.7	16.5	19.2
60-64	36.0	33.9	35.1	34.9	23.9	29.2	35.7	30.8	33.2
65-69	48.0	51.3	49.8	50.5	33.0	41.1	48.0	45.4	47.1
70 & over	115.4	107.4	111.4	82.6	94.6	88.7	105.0	103.6	104.2
All ages	11.5	10.6	11.1	7.8	7.4	7.6	10.2	9.5	9.9

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

TAMIL NADU				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	30.2	20.9	27.0	21.9
Urban	78.4	12.0	4.0	5.6
Combined	41.9	18.7	21.4	18.0

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

TAMIL NADU				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	9.4	18.1	22.3	50.2
Urban	36.8	35.6	4.6	23.0
Combined	14.5	21.3	19.0	45.2

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/ vaidya attended.

TABLE 1

Percent distribution of estimated population
by age-group and sex, 1987

UTTAR PRADESH

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.0	14.2	14.1	13.3	13.3	13.3	13.9	14.0	14.0
5-9	13.6	13.8	13.7	12.6	12.8	12.7	13.4	13.7	13.5
10-14	13.6	12.4	13.0	12.5	12.5	12.5	13.4	12.4	12.9
15-19	11.3	9.1	10.3	11.4	11.0	11.2	11.3	9.5	10.4
20-24	8.4	8.6	8.5	9.3	9.7	9.5	8.6	8.8	8.7
25-29	7.1	7.3	7.2	8.3	8.3	8.3	7.3	7.5	7.4
30-34	5.9	6.7	6.3	6.8	7.0	6.9	6.0	6.8	6.4
35-39	5.3	5.6	5.4	5.9	5.9	5.9	5.4	5.6	5.5
40-44	4.8	5.4	5.1	5.1	4.7	4.9	4.9	5.3	5.1
45-49	4.1	4.2	4.1	4.2	3.8	4.0	4.1	4.1	4.1
50-54	3.7	3.9	3.8	3.3	3.1	3.2	3.7	3.7	3.7
55-59	2.5	2.6	2.6	2.3	2.4	2.3	2.5	2.6	2.5
60-64	2.4	2.6	2.4	1.8	2.1	2.0	2.2	2.5	2.4
65-69	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.5
70 & Over	1.8	2.0	1.9	1.7	1.9	1.8	1.8	1.9	1.9
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2

Estimated age-specific fertility rates
and other fertility indicators, 1987

UTTAR PRADESH

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	100.5	42.0	87.8
20-24	302.9	229.6	287.6
25-29	279.5	238.1	270.8
30-34	218.3	156.6	206.3
35-39	145.3	116.6	139.6
40-44	72.1	54.3	69.1
45-49	34.7	17.3	31.6
Crude birth rate	39.3	32.1	37.9
General fertility rate	178.5	134.6	169.7
Total fertility rate	5.8	4.3	5.5
Gross reproduction rate	2.7	2.0	2.5

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

UTTAR PRADESH			
Age-group	Rural	Urban	Combined
1	2	3	4
15-19	221.0	274.1	225.6
20-24	325.5	337.9	327.5
25-29	284.2	260.7	279.6
30-34	223.9	163.0	212.2
35-39	151.7	122.8	146.0
40-44	78.9	59.4	75.6
45-49	39.7	20.6	36.5
General marital fertility rate	210.2	190.0	206.7
Total marital fertility rate	6.6	6.2	6.5

TABLE 4

Mortality Indicators, 1987

UTTAR PRADESH			
Indicators	Rural	Urban	Combined
1	2	3	4
Crude death rate	15.5	9.9	14.5
Infant mortality rate	136	80	127
Neo-natal mortality rate	77.2	40.8	71.4
Post _{neo} natal mortality rate	58.5	39.2	55.5
Peri-natal mortality rate	56.2	30.3	52.1
Still birth rate	12.7	5.8	11.6

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	UTTAR PRADESH								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	51.0	63.6	56.9	30.4	28.7	29.6	47.4	57.3	52.0
5-9	4.3	6.9	5.5	1.0	4.5	2.7	3.7	6.5	5.0
10-14	1.9	2.2	2.0	2.6	0.7	1.7	2.0	1.9	2.0
15-19	2.5	3.0	2.7	1.3	1.3	1.3	2.2	2.6	2.4
20-24	2.4	4.9	3.5	2.3	2.3	2.3	2.3	4.3	3.3
25-29	2.4	5.2	3.8	2.2	4.2	3.1	2.4	5.0	3.6
30-34	3.1	5.4	4.2	2.9	4.6	3.8	3.0	5.2	4.1
35-39	4.2	5.3	4.7	3.6	3.9	3.7	4.1	5.0	4.5
40-44	7.7	6.4	7.1	6.5	4.6	5.6	7.5	6.1	6.8
45-49	11.1	8.1	9.7	7.8	8.1	7.9	10.5	8.1	9.4
50-54	14.3	11.9	13.2	18.4	9.8	14.5	15.0	11.6	13.4
55-59	23.0	17.4	20.3	22.6	15.9	19.4	23.0	17.1	20.2
60-64	44.3	29.4	36.9	34.6	28.0	31.3	42.8	29.2	36.1
65-69	50.5	42.0	46.4	56.0	35.7	46.4	51.5	40.9	46.4
70 & over	91.2	87.3	89.3	87.9	82.2	85.1	90.6	86.4	88.6
All ages	14.5	16.7	15.5	10.3	9.7	10.0	13.7	15.4	14.5

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

UTTAR PRADESH				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	2.6	17.0	78.0	2.4
Urban	13.5	48.4	36.0	2.1
Combined	4.4	22.2	71.1	2.3

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.
 T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.
 U - Delivery conducted at home by untrained village dai or other untrained professional functionary.
 O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

UTTAR PRADESH				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	4.4	51.1	21.3	23.2
Urban	8.9	66.6	10.5	14.0
Combined	5.0	53.2	19.9	21.9

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.
 M - If the death occurred at home but was attended by a qualified practitioner.
 U - If the death occurred at home and was attended by an unqualified practitioner.
 N - No professional doctor/hakim/vaidya attended.

TABLE 1
Percent distribution of estimated population
by age-group and sex, 1987 WEST BENGAL

Age-group	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	14.4	14.6	14.5	9.3	10.3	9.7	12.9	13.4	13.2
5-9	11.4	11.9	11.6	9.3	10.6	9.9	10.8	11.5	11.1
10-14	12.5	12.6	12.5	10.2	10.8	10.5	11.9	12.1	12.0
15-19	11.8	11.1	11.4	10.1	10.6	10.3	11.2	11.0	11.1
20-24	8.5	8.9	8.7	9.3	10.1	9.7	8.7	9.2	9.0
25-29	8.4	8.4	8.4	9.9	9.9	9.9	8.8	8.8	8.8
30-34	7.6	7.0	7.3	8.7	8.0	8.4	7.9	7.3	7.6
35-39	5.7	5.4	5.6	7.4	6.5	7.0	6.2	5.7	6.0
40-44	5.0	4.6	4.8	6.7	5.8	6.3	5.5	4.9	5.2
45-49	3.8	3.9	3.9	5.6	4.5	5.1	4.3	4.1	4.2
50-54	3.5	3.6	3.6	4.7	3.9	4.3	3.9	3.7	3.8
55-59	2.6	2.7	2.6	3.3	2.8	3.1	2.8	2.7	2.7
60-64	1.9	2.0	1.9	2.2	2.2	2.2	2.0	2.0	2.0
65-69	1.4	1.5	1.5	1.6	1.7	1.6	1.5	1.6	1.5
70 & Over	1.5	1.8	1.7	1.7	2.3	2.0	1.6	2.0	1.8
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2
Estimated age-specific fertility rates
and other fertility indicators, 1987 WEST BENGAL

Age-group	Rural	Urban	Combined
1	2	3	4
15-19	108.7	58.4	95.5
20-24	263.6	161.0	233.0
25-29	214.8	136.8	190.9
30-34	149.9	79.8	128.8
35-39	91.1	35.0	73.6
40-44	45.4	13.4	35.2
45-49	14.3	14.9	11.5
Crude birth rate	34.6	20.9	30.7
General fertility rate	145.2	82.5	126.6
Total fertility rate	4.4	2.4	3.8
Gross reproduction rate	2.1	1.2	1.8

TABLE 3

Estimated age-specific marital fertility rates
and other fertility indicators, 1987

Age-group	WEST BENGAL		
	Rural	Urban	Combined
	1	2	3
15-19	310.3	331.5	313.5
20-24	325.9	270.4	312.6
25-29	233.5	168.3	215.2
30-34	162.2	88.2	140.2
35-39	101.0	38.8	81.6
40-44	53.3	15.4	40.9
45-49	18.7	6.3	15.0
General marital fertility rate	193.2	121.5	173.5
Total marital fertility rate	6.0	4.6	5.6

TABLE 4

Mortality Indicators, 1987

Indicators	WEST BENGAL		
	Rural	Urban	Combined
	1	2	3
Crude death rate	9.7	6.5	8.8
Infant mortality rate	77	43	71
Neo-natal mortality rate	45.8	21.7	41.2
Post ^{neo} -natal mortality rate	31.4	21.5	29.5
Peri-natal mortality rate	44.3	20.3	39.7
Still birth rate	16.3	8.5	14.8

TABLE 5

Estimated age-specific death rates
by sex, 1987

Age-group	WEST BENGAL								
	Rural			Urban			Combined		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
1	2	3	4	5	6	7	8	9	10
0-4	26.6	27.7	27.1	12.0	15.8	13.8	23.5	25.2	24.3
5-9	2.3	3.4	2.8	2.0	2.1	2.1	2.2	3.1	2.6
10-14	1.5	1.4	1.5	1.5	0.2	0.9	1.5	1.1	1.3
15-19	1.8	3.4	2.4	0.9	1.7	1.3	1.6	2.9	2.2
20-24	2.7	2.6	2.7	1.8	2.2	2.0	2.4	2.5	2.5
25-29	1.9	2.4	2.1	1.7	1.6	1.6	1.8	2.1	2.0
30-34	2.3	3.1	2.7	1.8	1.5	1.6	2.1	2.6	2.4
35-39	3.2	2.8	3.0	2.0	2.1	2.0	2.8	2.6	2.7
40-44	5.9	5.0	5.4	3.4	3.8	3.6	5.0	4.6	4.8
45-49	9.6	5.8	7.7	5.0	5.4	5.2	7.9	5.7	6.8
50-54	12.5	9.2	10.9	9.5	8.7	9.2	11.4	9.0	10.3
55-59	22.7	18.2	20.5	20.3	10.5	16.3	21.9	16.0	19.1
60-64	36.4	24.4	30.5	25.8	30.1	27.7	32.9	26.0	29.6
65-69	38.3	33.7	36.0	31.1	30.0	30.6	36.0	32.6	34.3
70 & over	100.1	94.9	97.4	97.7	64.2	79.8	99.4	85.1	91.8
All ages	9.7	9.8	9.7	6.5	6.4	6.5	8.8	8.9	8.8

TABLE 6

Percent distribution of sample births by type of medical attention at birth, 1987

WEST BENGAL				
Sector	Type of medical attention at birth			
	I	T	U	O
1	2	3	4	5
Rural	21.4	6.8	44.6	27.2
Urban	76.9	10.2	6.3	6.6
Combined	28.9	7.3	39.4	24.4

I - Institutions like hospitals, maternity/nursing homes, health centres, etc.

T - Delivery conducted at home by doctor, trained dai, trained mid-wife, trained nurses, etc.

U - Delivery conducted at home by untrained village dai or other untrained professional functionary.

O - Delivery conducted at home by relation and others excluding the above.

TABLE 7

Percent distribution of sample deaths by type of medical attention received before death, 1987

WEST BENGAL				
Sector	Type of medical attention at death			
	I	M	U	N
1	2	3	4	5
Rural	8.9	32.3	41.3	17.5
Urban	37.6	51.4	6.8	4.2
Combined	13.2	35.1	36.2	15.5

I - If the death occurred in a hospital, dispensary, health centre, other medical institutions, etc.

M - If the death occurred at home but was attended by a qualified practitioner.

U - If the death occurred at home and was attended by an unqualified practitioner.

N - No professional doctor/hakim/vaidya attended.

GLOSSARY

Crude Birth Rate (CBR)	$\frac{\text{Number of live birth during in the year}}{\text{Mid-year Population}} \times 1000$
Crude Death rate (CDR)	$\frac{\text{Number of deaths during the year}}{\text{Mid-year Population}} \times 1000$
Infant mortality Rate (IMR)	$\frac{\text{Number of infant deaths during the year}}{\text{Number of live births during the year}} \times 1000$
Still Birth Rate (SBR)	$\frac{\text{Number of still births during the year}}{\text{Number of live births+still births during the year.}} \times 1000$
Peri-natal Mortality Rate (PMR)	$\frac{\text{Number of still births + infant deaths of less than 7 days during the year}}{\text{Number of live births+ still births during the year.}} \times 1000$
Neo-natal Mortality Rate (NMR)	$\frac{\text{Number of infant deaths of less than 28 days during the year}}{\text{Number of live births during the year}} \times 1000$
Post Neo-natal Mortality Rate (PNMR)	$\frac{\text{Number of infant deaths of over 28 days during the year}}{\text{Number of live births during the year}} \times 1000$
Age-specific Fertility Rate (ASFR)	$\frac{\text{Number of live births in a particular Age group.}}{\text{Mid-year female population of the same age-group.}} \times 1000$
General Fertility Rate (GFR)	$\frac{\text{Number of live births in a year}}{\text{Mid-year female population in the age group (15-49) years.}} \times 1000$

Total Fertility Rate

$$5 \times \frac{\text{45-49 ASFRs} + \text{15-19 ASFRs}}{1000}$$

Gross Reproduction Rate

$$5 \times \frac{\text{45-49 ASFRs for female live births} + \text{15-19 ASFRs for female live births}}{1000}$$

Age Specific Marital Fertility Rate(ASMFR)

$$\frac{\text{Number of live births in a particular age-group}}{\text{Mid-year married female population of the same age-group}} \times 1000$$

General Marital Fertility Rate(GMFR)

$$\frac{\text{Number of live births in a year}}{\text{Mid-year married female population of the age-group (15-49)}} \times 1000$$

Total Marital Fertility Rate(TMFR)

$$5 \times \frac{\text{45-49 ASMFRs} + \text{15-19 ASMFRs}}{1000}$$

Age-Specific Mortality Rate(ASMR)

$$\frac{\text{Number of deaths in a particular Age-group}}{\text{Mid-year population of the same age-group}} \times 1000$$

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