



SAMPLE REGISTRATION SYSTEM

STATISTICAL REPORT 1997



**REGISTRAR GENERAL, INDIA
NEW DELHI**

P R E F A C E

In the absence of dependable data from the Civil Registration System (CRS) in India, the Sample Registration System (SRS) has been 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 surveys 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.

The present report gives an analysis of population composition by broad age groups, sex and marital status, fertility and mortality levels by sex and broad age groups etc., for India and bigger states. It also gives information on items of demographic interest such as mean age at effective marriage for females, interval between current live birth and previous live birth and also distribution of live births by birth order. These additional items are being collected through SRS from 1990 onwards on the basis of certain recommendations of a Technical Committee. The report also provides data on fertility by level of education of the women to study the impact of female education on fertility. I am sure these items will be of interest to demographers and other data users.

The SRS is a joint effort of the Central and State Governments and this study has been possible with the active involvement of staff and officers of the Directorates of Economics & Statistics of Kerala and Maharashtra as well as the staff and officers of the Directorates of Census Operations and the SRS Wing of the Vital Statistics Division at the headquarters. This report has been processed and prepared on personal computers and has come out as the collective effort of all staff members. I am happy to place on record my appreciation of the efforts put in by Shri A.K. Saxena, Assistant Director, Km. Prabha, Data Entry Operator, S/Shri Brijesh Kumar, S.K. Jain and Ravi Kant, Computers and Smt. Shashi Chawla, Stenographer in the preparation of this report under the overall guidance of Shri S.K. Sinha, Deputy Registrar General.

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Jayant Kumar Banthia
Registrar General, India

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DEFINITIONS

Crude birth rate (CBR)	=	$\frac{\text{Number of live births during the year}}{\text{Mid-year population}} \times 1000$
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 (TFR)	=	$\frac{5 \times \sum_{15-19}^{45-49} \text{ASFR}}{1000}$
Gross reproduction rate (GRR)	=	$\frac{5 \times \sum_{15-19}^{45-49} \text{ASFR for female live births}}{1000}$
Age-specific marital fertility rate (ASMFR)	=	$\frac{\text{Number of live births in a particular age-group}}{\text{Mid-year married female population of thesame age-group}} \times 1000$
General marital fertility rate (GMFR)	=	$\frac{\text{Number of live births in a year}}{\text{Mid-year married female population in theage-group (15-49) year}} \times 1000$
Total marital fertility Rate (TMFR)	=	$\frac{5 \times \sum_{15-19}^{45-49} \text{ASMFR}}{1000}$

$$\text{Crude death rate (CDR)} = \frac{\text{Number of deaths during the year}}{\text{Mid-year population}} \times 1000$$

$$\text{Age-specific mortality rate (ASMR)} = \frac{\text{Number of deaths in a particular age-group}}{\text{Mid-year population of the same age-group}} \times 1000$$

$$\text{Infant mortality rate (IMR)} = \frac{\text{Number of infant deaths during the year}}{\text{Number of live births during the year}} \times 1000$$

Infant mortality rate comprises of two parts viz. Neo-natal mortality rate and Post neo-natal mortality rate. The neo-natal mortality rate also comprises of two part viz. Early neo-natal mortality rate and late neo-natal mortality rate. These are defined as:

$$\text{Neo-natal mortality rate (NMR)} = \frac{\text{Number of infant deaths of less than 29 days during the year}}{\text{Number of live births during the year}} \times 1000$$

$$\text{Early neo natal mortality rate} = \frac{\text{Number of infant deaths of less than 7 days during the year}}{\text{Number of live births during the year}} \times 1000$$

$$\text{Late neo-natal mortality rate} = \frac{\text{Number of infant deaths of 7 days to less 29 days during the year}}{\text{Number of live births during the year}} \times 1000$$

$$\text{Post neo-natal mortality rate (PNMR)} = \frac{\text{Number of deaths of 29 days to less than one year during the year}}{\text{Number of live births during the year}} \times 1000$$

$$\text{Peri-natal mortality rate (PMR)} = \frac{\text{Number of still births and infant deaths of less than 7 days during the year}}{\text{Number of live births and still births during the year}} \times 1000$$

$$\text{Still birth rate (SBR)} = \frac{\text{Number of still births during the year}}{\text{Number of live births and still births during the year}} \times 1000$$

FIGURES AT A GLANCE, INDIA - 1997

Item	Total	Rural	Urban
I. Per cent distribution of population by broad age groups			
0-14	35.9	37.1	31.7
15-59	57.4	56.0	62.3
60+	6.7	6.9	6.0
II. Fertility Indicators			
Crude Birth Rate	27.2	28.9	21.5
General Fertility Rate	109.9	119.5	80.7
Age specific Fertility Rate			
15-19	53.7	60.7	31.5
20-24	225.6	241.8	177.8
25-29	188.2	200.1	151.6
30-34	109.1	121.8	70.6
35-39	54.6	63.2	28.8
40-44	25.8	30.3	12.0
45-49	7.7	9.2	3.2
Total Fertility Rate	3.3	3.6	2.4
Gross Reproduction Rate	1.6	1.7	1.1
General Marital Fertility Rate	144.7	153.6	114.5
Total Marital Fertility Rate	4.7	4.9	4.1
Mean age at effective marriage for females	19.1	19.0	20.7
III. Total Fertility Rate by level of education of the mother			
Illiterate	4.4	4.6	3.7
Literate	2.5	2.7	2.1
Without formal education	3.4	3.5	3.1
Below class X	2.7	2.8	2.4
Class X-XII	2.1	2.3	1.8
Above class XII	1.7	2.0	1.6
IV. Per cent distribution of live births by birth order			
1	30.8	29.6	36.4
2	25.5	25.8	29.6
3	18.0	18.4	16.3
4+	25.2	26.6	18.4
V. Per cent distribution of Current live births by birth interval (in months)			
10-12	0.5	0.5	0.5
12-18	7.8	7.6	8.6
18-24	14.8	15.1	13.7
24-30	23.1	23.0	23.7
30-36	10.2	10.5	9.1
36+	43.5	43.3	44.3

FIGURES AT A GLANCE, INDIA - 1997

Item	Total	Rural	Urban
VI. Mortality Indicators			
Crude Death Rate	8.9	9.6	6.5
Percentage of infant deaths to total deaths	21.7	23.1	14.9
Percentage of deaths of less than one week to total infant deaths	48.8	49.3	44.9
Infant Mortality Rate	71	77	45
Neo-natal mortality rate	46	51	26
Early neo-natal mortality rate	35	38	20
Late neo-natal mortality rate	11	13	6
Post neo-natal mortality rate	25	26	19
Peri-natal Mortality Rate	43	46	29
Still Birth Rate	9	9	9
VII. Percentage distribution of births by type of medical attention at delivery			
Institutional	25.4	17.8	59.6
Doctor, nurse or trained midwife	28.7	28.1	31.2
Traditional birth attendants	41.7	49.2	7.7
Relatives and others	4.2	4.8	1.5
VIII. Percentage distribution of deaths by type of medical attention before death			
Institutional	20.0	16.8	35.8
Medical attention other than institution	67.6	69.3	59.6
No medical attention	12.4	13.9	4.6