



सत्यमेव जयते

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# **SAMPLE REGISTRATION SYSTEM STATISTICAL REPORT 2010**



**OFFICE OF THE REGISTRAR GENERAL, INDIA  
MINISTRY OF HOME AFFAIRS  
GOVERNMENT OF INDIA  
NEW DELHI**

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## P R E F A C E

The Sample Registration System (SRS) in India is the largest demographic survey in the world covering about 1.5 million households and 7.3 million population. It has continued to be the main source of information on fertility and mortality indicators both at the State and National levels. Apart from the large sample size and geographical spread in most of the Districts, the system has a unique feature of dual recording, which involves collection of data through two different procedures viz., continuous enumeration and retrospective half-yearly surveys. The continuous enumeration and retrospective surveys are followed by the process of matching of the two records and subsequent field verification of unmatched and partially matched events. The system provides a cross check on the correctness and completeness of the events of birth and death listed by the two independent functionaries.

2. Based on the dual record system, the SRS has been providing reliable estimates of fertility and mortality on a regular basis from 1971 onward. It includes data on population composition by broad age groups, sex and marital status, fertility and mortality levels, for India and bigger States (with population 10 million and above) separately for rural and urban areas. As per the recommendations of the Technical Committee, from 1990 onward tabulations on certain items of demographic interest such as mean age at effective marriage for females, interval between current and previous live birth and also distribution of live births by birth order have continued to form part of the SRS report. From 2000, the sex ratio at birth and from 2002, the sex ratio of child (age-group 0-4) have been included in this Report. Moreover, in order to facilitate effective tracking of Millennium Development Goals (MDGs) on under-five mortality, the estimates of under-five mortality for India and bigger States separately for rural and urban also by sex have been introduced in this Report since 2008.

3. The present Report is the sixth in the series that has been prepared based on data collected from new SRS sample units selected on the 2001 Census frame. Apart from the fertility and mortality indicators, this Report includes data on crude birth rate, crude death rate and infant mortality rates at Natural Division (group of contiguous districts) level for rural areas of a State. In the present Report, an executive summary containing important findings has been added to enhance its utility. For those who are interested in trend analysis, the National level trends for few core indicators have been presented since 2004 (the base year of new frame). Detailed State-level tables on these indicators for 2005-2010 have also been added to provide a glimpse of the trends. Henceforth, these additions would become a regular feature of the Report. With the modification of the system and consistent efforts of SRS Division and the Directorates of Census Operations, it has been our endeavor to release the report by year end. However, adhering to this timeline during the Census 2011 period was a big challenge. Nevertheless, we have succeeded in restricting the delay to a few months only.

4. The SRS has been a joint effort of the Central and State Governments. This study has been made 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, Map Division and the SRS Wing of the Vital Statistics Division at the headquarters. I am thankful to all of them. I must specially place on record my appreciation of the efforts put in by Shri P.K. Majumdar, Joint Director, Shri Jaspal Singh, Deputy Director, Smt Gracy James, Assistant Director, Shri Jagat Singh, S.I. Grade-I, Shri Brijesh Kumar and Shri Ravi Kant, S.I Grade- II, Smt. Prabha Agarwal and Shri R.S. Kar, Data Entry Operators, in the preparation of this Report supervised by Shri Bhaskar Mishra, Deputy Registrar General under the overall guidance of Dr. R.C. Sethi, Addl. Registrar General, India.

**New Delhi**  
March, 2012

**Dr. C. Chandramouli**  
Registrar General & Census Commissioner, 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)	=	$5 \times \frac{\sum_{15-19}^{45-49} \text{ASFR}}{1000}$
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)	=	$\frac{\text{Number of live births in a particular age-group}}{\text{Mid-year married female population of the same age-group}} \times 1000$
General marital fertility rate (GMFR)	=	$\frac{\text{Number of live births in a year}}{\text{Mid-year married female population in the age-group (15-49) year}} \times 1000$
Total marital fertility rate (TMFR)	=	$5 \times \frac{\sum_{15-19}^{45-49} \text{ASMFR}}{1000}$
Crude death rate (CDR)	=	$\frac{\text{Number of deaths during the year}}{\text{Mid-year population}} \times 1000$

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

Under-five Mortality Rate = The under-five mortality is the probability ( ${}_5q_0$ ) that a child born in a specific year or time period will die before reaching the age of five, subject to current age specific mortality rates. It is expressed as a rate per 1,000 live births.

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

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 parts viz. Early neo-natal mortality rate and late neo-natal mortality rate. These are defined as:

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

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

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

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

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

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