



SAMPLE REGISTRATION SYSTEM STATISTICAL REPORT 2016

(Field work period: 2017)



**OFFICE OF THE REGISTRAR GENERAL &
CENSUS COMMISSIONER, 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 1.7 million households and 7.6 million population. It continues to be the main source of information on fertility and mortality both at the State and National levels. Apart from the large sample size and geographic spread in most of the Districts, the system has a unique feature of dual recording, which involves 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 for 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 onwards. It includes data on population composition by broad age groups, sex and marital status, fertility and mortality levels, for India and bigger States/UTs (with population 10 million and above) separately for rural and urban areas. 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. The sex ratio at birth has been included in this Report as in the past. Moreover, in order to facilitate effective tracking of Sustainable Development Goals (SDGs) on under-five mortality, the estimates for India and bigger States/UTs, separately for rural and urban and also by sex have been provided in this Report.

3. The present Report is the third in the series that has been prepared based on data collected from new SRS sample units selected from 2011 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. It has been our endeavour to release the SRS Report by the end of succeeding year. Previous Report (2015) was published in May 2017. The margin of delay is substantially reduced this time.

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 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 complement the contribution and efforts put in by Muhammed. Yasir F., Senior Research Officer, Ms. Jasleen Kaur Rekhi, Research Officer, Shri Ravi Kant, SI Grade-II and Ms. Prabha Agarwal, DEO in preparation of this Report, supervised by Smt Sandhya Singh, Deputy Registrar General.

(SAILESH)

Additional Secretary & Registrar General of India

CONTENTS

	Page
List of statements	ix- xii
List of charts	xiii-xviii
Definitions	xix-xx
Figures at a glance, India – 2016	xxi-xxiii
National level trends for few core indicators 2011-16	xxv
Executive Summary	xxvii-xxviii
Chapter 1- Introduction	1-9
Chapter 2 - Population Composition	11-46
Chapter 3 - Estimates of Fertility Indicators	47-119
Chapter 4 - Estimates of Mortality Indicators	121-183

Detailed Tables

1.	Percentage distribution of estimated population by age-group, sex and residence, 2016	187-198
2.	Percentage distribution of population by sex, marital status and age-group, 2016	199-221
3.	Fertility Indicators, 2016	222-228
4.	Fertility indicators by level of education of women, 2016	229-251
5.	Percentage distribution of live births by order of birth, 2016	252-258
6.	Percentage distribution of current live births by birth interval, 2016	259-260
7.	Percentage distribution of current live births by birth interval and birth order, 2016	261-267
8.	Age-specific death rate by sex and residence, 2016	268-290
9.	Child (Aged 0-4 years) and infant mortality indicators, 2016	268-290
10.	Percentage distribution of deaths to total deaths by residence, sex and age-group, 2016	291-302
11.	Birth rate, death rate and infant mortality rate by NSSO natural division, 2016	303-305

Tables on Trend

12.	Annual estimates of Birth rate by residence, India and bigger States/UTs, 2011-16	309
13.	Annual estimates of Death rate by sex, India and bigger States/UTs, 2011-16	310
14.	Annual estimates of Infant mortality rate by sex, India and bigger States/UTs, 2010-15	311
15.	Annual estimates of Total Fertility rate by residence, India and bigger States/UTs, 2010-16	312
16.	Sex ratio at birth (female per 1000 male) by residence, India and bigger States/UTs, 2010-12 to 2014-16	313
17.	Percent of live births where the mothers received medical attention at delivery either at Government hospitals or at Private hospitals, India and bigger States/UTs, 2011-16	314
18.	Percent of deaths where medical attention received before death was either at Government hospitals or at Private hospitals, India and bigger States/UTs, 2011-16	315

Annexure

I	Map of natural divisions	319
II	List of natural divisions along with their districts	321-335

LIST OF STATEMENTS

		Page
General		
1	Number of sample units at different replacement period	2
2	Number of sample units and population covered, India, States and union territories, 2016	5
Population Composition		
3	Percentage distribution of population by broad age groups to total population by sex and residence, India, 2016	12
4	Percentage of population in the age group 0-4 years to total population by sex and residence, India and bigger States/UTs, 2016	15
5	Percentage of population in the age group 0-14 years to total population by sex and residence, India and bigger States/UTs, 2016	17
6	Percentage of population in the age group 15-59 years to total population by sex and residence, India and bigger States/UTs, 2016	19
7	Percentage of population in the age group 60 years and above to total population by sex and residence, India and bigger States/UTs, 2016	21
8	Percentage distribution of population by marital status and sex, India and bigger States/UTs, 2016	23
9	Percentage distribution of population age 10+ by marital status and sex, India and bigger States/UTs, 2016	27
10	Percentage distribution of female age 10+ by marital status and residence, India and bigger States/UTs, 2016	31
11	Percentage distribution of female age 15+ by marital status and residence, India and bigger States/UTs, 2016	35
12	Percentage of females by age at effective marriage and by residence, India and bigger States/UTs, 2016	39
13	Mean age at effective marriage of female by residence, India and bigger States/UTs, 2016	43

Fertility Indicators		Page
14	CBR (Crude birth rate) by residence, India and bigger States/UTs, 2016	48
15	Percent change in average crude birth rate between 2004-06 and 2014-16 by residence, India and bigger States/UTs	51
16	Sex ratio (female per 1000 male) at birth by residence, India and bigger States/UTs 2014-16	56
17	GFR (General fertility rate) by residence, India and bigger States/UTs, 2016	58
18	Percentage change in average GFR (General fertility rate) between 2004-06 and 2014-16, by residence, India and bigger States/UTs	61
19	ASFRs (Age specific fertility rates) by residence, 2016	66
20	Percentage change in age specific fertility rates by residence between 2004-06 and 2014-16, India	68
21	ASFRs (Age specific fertility rates), India and bigger States/UTs, 2016	73
22	Percentage distribution of cumulative fertility by age group, India and bigger States/UTs, 2016	74
23	Mean age of fertility and associated standard deviation, India and bigger States/UTs, 2016	76
24	TFR (Total fertility rate) by residence, India and bigger States/UTs, 2016	78
25	Percentage change in average TFR (Total fertility rate) between 2004-06 and 2014-16 by residence, India and bigger States/UTs	81
26	GRR (Gross reproduction rate) by residence, India and bigger States/UTs, 2016	86
27	ASMFRs (Age specific marital fertility rates) by residence, India 2016	88
28	ASMFRs (Age specific marital fertility rates) India and bigger States/UTs, 2016	90
29	TMFRs (Total marital fertility rates) by residence, India and bigger States/UTs, 2016	91

		Page
30	Percentage change in average Total Marital Fertility rate (TMFR) between 2004-06 and 2014-16 by residence, India and bigger States/UTs	93
31	Percentage female population in the age group 15-49 by level of education, India and bigger States/UTs, 2016	98
32	GFR (General fertility rate) by level of education of women, India and bigger States/UTs, 2016	99
33	ASFR (Age specific fertility rate) by level of education of women and residence, India, 2016	100
34	TFR (Total fertility rate) by level of education of women, India and bigger States/UTs, 2016	104
35	Percentage distribution of current live births by birth order, India and bigger States/UTs, 2016	106
36	Percentage distribution of current live births by birth order and residence, India and bigger States/UTs, 2016	108
37	Percentage distribution of second and higher order live births by interval, India and bigger States/UTs, 2016	111
38	Percentage distribution of second and higher order live births by interval and residence, India and bigger States/UTs, 2016	113
39	Percentage distribution of live births by type of medical attention received by the mother at delivery by residence, India and bigger States/UTs, 2016	116

Mortality Indicators

40	CDR (Crude death rate) by residence, India and bigger States/UTs, 2016	122
41	Percentage change in average crude death rate between 2004-06 and 2014-16, by residence, India and bigger States/UTs	125
42	CDR (Crude death rate) by sex and residence, India, 2016	130
43	CDR (Crude death rate) by sex, India and bigger States/UTs, 2016	131
44	Percentage distribution of deaths by broad age groups, India and bigger States/UTs, 2016	133
45	Percentage of infant deaths to total deaths by residence, India and bigger States/UTs, 2016	135

	Page	
46	IMR (Infant mortality rate) by sex and residence, India and bigger States/UTs, 2016	137
47	Percentage change in average IMR (Infant mortality rate) between 2004-06 and 2014-16 by residence, India and bigger States/UTs	142
48	Neo-natal mortality rate and percentage share of neo-natal deaths to infant deaths by residence, India and bigger States/UTs, 2016	147
49	Early neo-natal mortality rate and percentage share of early neo-natal deaths to infant deaths by residence, India and bigger States/UTs, 2016	151
50	Peri-natal mortality rate and Still birth rates by residence, India and bigger States/UTs, 2016	155
51	Percentage of deaths in the age group 0-4 years to total deaths by residence, India and bigger States/UTs, 2016	158
52	Estimated death rate for children age 0-4 years by sex and residence, India and bigger States/UTs, 2016	160
53	Under-five Mortality Rate by sex and residence, India and bigger States/UTs, 2016	164
54	Death rates for children age 5-14 years by sex and residence, India and bigger States/UTs, 2016	168
55	Death rate for persons age 15-59 years by sex and residence, India and bigger States/UTs, 2016	172
56	Death rate for persons age 60 years and above by sex and residence, India and bigger States/UTs, 2016	176
57	Percentage distribution of deaths by type of medical attention received before death by residence, India and bigger States/UTs, 2016	180

LIST OF CHARTS

	Page
1. Flow chart	9
2. Percentage distribution of population by broad age-groups and residence, India, 2016	13
3. Population Pyramid, India, 2016	14
4. Percentage of child population (0-4 years) to total population by residence, India and bigger States/UTs, 2016	16
5. Percentage of population age 0-14 years to total population by residence, India and bigger States/UTs, 2016	18
6. Percentage of population age 15-59 years to total population by residence, India and bigger States/UTs, 2016	20
7. Percentage of population age 60+ to total population by residence, India and bigger States/UTs, 2016	22
8. Percentage distribution of population by marital status, India and bigger states/UTs, 2016	24
9. Percentage distribution of MALE population by marital status, India and bigger states/UTs, 2016	25
10. Percentage distribution of FEMALE population by marital status, India and bigger states/UTs, 2016	26
11. Percentage distribution of population aged 10+ by marital status, India and bigger states/UTs, 2016	28
12. Percentage distribution of MALE population aged 10+ by marital status, India and bigger states/UTs, 2016	29
13. Percentage distribution of FEMALE population aged 10+ by marital status, India and bigger states/UTs, 2016	30
14. Percentage distribution of female aged 10+ by marital status India and bigger states/UTs, 2016	32
15. Percentage distribution of female aged 10+ by marital status India and bigger states/UTs, 2016 –RURAL	33
16. Percentage distribution of female aged 10+ by marital status India and bigger states/UTs, 2016 – URBAN	34
17. Percentage distribution of female aged 15+ by marital status India and bigger states/UTs, 2016	36
18. Percentage distribution of female aged 15+ by marital status India and bigger states/UTs, 2016 –RURAL	37

19.	Percentage distribution of female aged 15+ by marital status India and bigger states/UTs, 2016- URBAN	38
20.	Female by age at Effective Marriage, India and bigger States/UTs, 2016	40
21.	Female by age at Effective Marriage, India and bigger States/UTs, 2016 – RURAL	41
22.	Female by age at Effective Marriage, India and bigger States/UTs, 2016 – URBAN	42
23.	Mean age at effective marriage of female, India and bigger States/UTs, 2016	44
24.	Mean Age at Effective Marriage of Female, India and bigger States/UTs, 2016 – RURAL	45
25.	Mean Age at Effective Marriage of Female, India and bigger States/UTs, 2016 - URBAN	46
26.	CBR (Crude birth rate) by residence, India and bigger States/UTs, 2016	49
27.	Distribution of bigger States/UTs by values of birth rate for rural and urban areas, 2016	50
28.	Average birth rate between 2004-06 & 2014-16, India and bigger states/UTs	52
29.	Average birth rate between 2004-06 & 2014-16, India and bigger states/UTs -RURAL	53
30.	Average birth rate between 2004-06 & 2014-16, India and bigger states/UTs - URBAN	54
31.	Per cent change in average birth rate between 2004-06 and 2014-16 by residence, India and bigger states/UTs	55
32.	Sex ratio at birth by residence, India and bigger States, 2014-2016	57
33.	GFR (General fertility rate) by residence, India and bigger States/UTs, 2016	59
34.	Distribution of bigger States/UTs by values of GFR (General fertility rate) for rural and urban areas, 2016	60
35.	GFR (General Fertility Rate) between 2004-06 & 2014-16, India and bigger States/UTs	62
36.	GFR (General Fertility Rate) between 2004-06 & 2014-16, India and bigger States/UTs -RURAL	63
37.	GFR (General Fertility Rate) between 2004-06 & 2014-16, India and bigger States/UTs - URBAN	64

38.	Percent change in average GFR (General Fertility Rate) between, 2004-06 and 2014-16 by residence, India and bigger States/UTs	65
39.	ASFRs (Age-specific fertility rates) by residence, India, 2016	67
40.	Age specific fertility rates, India: 2004-06 and 2014-16	69
41.	Per cent change in age specific fertility rates between 2004-06 and 2014-16, India -RURAL	70
42.	Per cent change in age specific fertility rates between 2004-06 and 2014-16, India -URBAN	71
43.	Per cent change in age specific fertility rates by residence between 2004-06 and 2014-16, India	72
44.	Per cent distribution of cumulative fertility by residence, 2016	75
45.	Mean age of fertility, India and bigger states/UTs, 2016	77
46.	TFR (Total fertility rate) by residence, India and bigger States/UTs, 2016	79
47.	Distribution of bigger States/UTs by values of TFR (Total fertility rate) for rural and urban areas, 2016	80
48.	Total fertility rate (TFR) between 2004-06 and 2014-16, India and bigger States/UTs	82
49.	Total fertility rate (TFR) between 2004-06 and 2014-16, India and bigger States/UTs - RURAL	83
50.	Total fertility rate (TFR) between 2004-06 and 2014-16, India and bigger States/UTs - URBAN	84
51.	Per cent change in average Total fertility rate (TFR) between 2004-06 and 2014-16 by residence, India and bigger States/UTs	85
52.	Gross reproduction rate (GRR) by residence, India and bigger states/UTs, 2016	87
53.	Age specific marital fertility rates (ASMFRs) by residence, India, 2016	89
54.	Total marital fertility rate (TMFRs) by residence, India and bigger states/UTs, 2016	92
55.	Average Total Marital fertility rate (TMFR) between 2004-06 & 2014-16, India and bigger States/UTs	94
56.	Average Total Marital fertility rate (TMFR) between 2004-06 & 2014-16, India and bigger States/UTs -RURAL	95
57.	Average Total Marital fertility rate (TMFR) between 2004-06 & 2014-16, India and bigger States/UTs - URBAN	96

58.	Percent change in average Total Marital fertility rate (TMFR) between 2004-06 & 2014-16, India and bigger States/UTs	97
59.	Age specific fertility rate by level of education of women, India, 2016	101
60.	Age specific fertility rate by level of education of women, India, 2016 -RURAL	102
61.	Age specific fertility rate by level of education of women, India, 2016 -URBAN	103
62.	Total fertility rate by level of education of women, India, 2016	105
63.	Percentage distribution of current live births by birth order, 2016	107
64.	Percentage distribution of current live births by birth order - RURAL	109
65.	Percentage distribution of current live births by birth order - URBAN	110
66.	Percentage distribution of second and higher order live births by interval, 2016	112
67.	Percentage distribution of second and higher order live births by interval- RURAL	114
68.	Percentage distribution of second and higher order live births by interval-URBAN	115
69.	Distribution of live births by type of Medical Attention received by the mother at delivery	117
70.	Distribution of live births by type of Medical Attention received by the mother at delivery - RURAL	118
71.	Distribution of live births by type of Medical Attention received by the mother at delivery - URBAN	119
72.	CDR (Crude death rate) by residence, India and bigger States/UTs, 2016	123
73.	Distribution of bigger States/UTs by values of death rate for rural and urban areas, 2016	124
74.	Average Death rate between 2004-06 & 2014-16, India and bigger States/UTs	126
75.	Average Death rate between 2004-06 & 2014-16, India and bigger States/UTs -RURAL	127
76.	Average Death rate between 2004-06 & 2014-16, India and bigger States/UTs - URBAN	128
77.	Per cent change in average death rates between 2004-06 and 2014-16, India and bigger States/UTs	129
78.	Crude death rates by sex and residence, India, 2016	130
79.	Crude death rates by sex, India and bigger States/UTs, 2016	132

80.	Distribution of deaths by broad age groups India and bigger States/UTs, 2016	134
81.	Percentage of Infant deaths to total deaths by residence, 2016	136
82.	Infant mortality rates by sex, India and major states, 2016	138
83.	Infant mortality rates by sex, India and major states, 2016 -RURAL	139
84.	Infant mortality rates by sex, India and major states, 2016 -URBAN	140
85.	Distribution of bigger States/UTs by IMR (Infant mortality rate) for rural and urban areas, 2016	141
86.	Average Infant mortality rate between 2004-06 & 2014-16, India and bigger States/UTs, 2016	143
87.	Average Infant mortality rate between 2004-06 & 2014-16, India and bigger States/UTs -RURAL	144
88.	Average Infant mortality rate between 2004-06 & 2014-16, India and bigger States/UTs - URBAN	145
89.	Per cent change in average Infant mortality rates between 2004-06 and 2014-16, India and bigger States/UTs	146
90.	Neo-natal mortality rates and percentage share of neo-natal deaths to infant deaths, India and bigger States/UTs, 2016	148
91.	Neo-natal mortality rates and percentage share of neo-natal deaths to infant deaths, India and bigger States/UTs, 2016 - RURAL	149
92.	Neo-natal mortality rates and percentage share of neo-natal deaths to infant deaths by residence, India and bigger States/UTs, 2016 - URBAN	150
93.	Early neo-natal mortality rates and percentage share of early neo-natal deaths to infant deaths, India and bigger States/UTs, 2016	152
94.	Early neo-natal mortality rates and percentage share of early neo-natal deaths to infant deaths, India and bigger States/UTs, 2016 - RURAL	153
95.	Early neo-natal mortality rates and percentage share of early neo-natal deaths to infant deaths, India and bigger States/UTs, 2016 - URBAN	154
96.	Perinatal mortality rates, India & bigger States/UTs, 2016	156
97.	Still birth rates , India & bigger States/UTs, 2016	157
98.	Percentage of deaths in the age group 0-4 years to total deaths, India and bigger States/UTs	159
99.	Estimated death rate for children age 0-4 years by sex, 2016	161
100.	Estimated death rate for children age 0-4 years by sex, 2016 – RURAL	162

101.	Estimated death rate for children age0-4 years by sex, 2016 - URBAN	163
102.	Under-five Mortality Rates (U5MR) by sex , India & bigger States/UTs, 2016	165
103.	Under-five Mortality Rates (U5MR) by sex , India & bigger States/UTs, 2016- RURAL	166
104.	Under-five Mortality Rates (U5MR) by sex , India & bigger States/UTs, 2016-URBAN	167
105.	Death rates for children aged 5-14 years by sex, India and bigger States/UTs, 2016	169
106.	Death rates for children aged 5-14 years by sex, India and bigger States/UTs, 2016 - RURAL	170
107.	Death rates for children aged 5-14 years by sex, India and bigger States/UTs, 2016 - URBAN	171
108.	Death rates for Persons aged 15-59 years by sex, India and bigger States/UTs, 2016	173
109.	Death rates for Persons aged 15-59 years by sex, India and bigger States/UTs, 2016 - RURAL	174
110.	Death rates for Persons aged 15-59 years by sex, India and bigger States/UTs, 2016 - URBAN	175
111.	Death rates for Persons aged 60 years and above by sex, India and bigger States/UTs, 2016	177
112.	Death rates for Persons aged 60 years and above by sex, India and bigger States/UTs, 2016 - RURAL	178
113.	Death rates for Persons aged 60 years and above by sex, India and bigger States/UTs, 2016 - URBAN	179
114.	Distribution of deaths by Type of Medical Attention received before death, India & bigger States/UTs, 2016	181
115.	Distribution of deaths by Type of Medical Attention received before death, India & bigger States/UTs, 2016 - RURAL	182
116.	Distribution of deaths by Type of Medical Attention received before death, India & bigger States/UTs, 2016 - URBAN	183

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)	=	$\frac{5 \times \sum_{15-19}^{45-49} \text{ASMFR}}{1000}$
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:

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

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

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

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

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

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