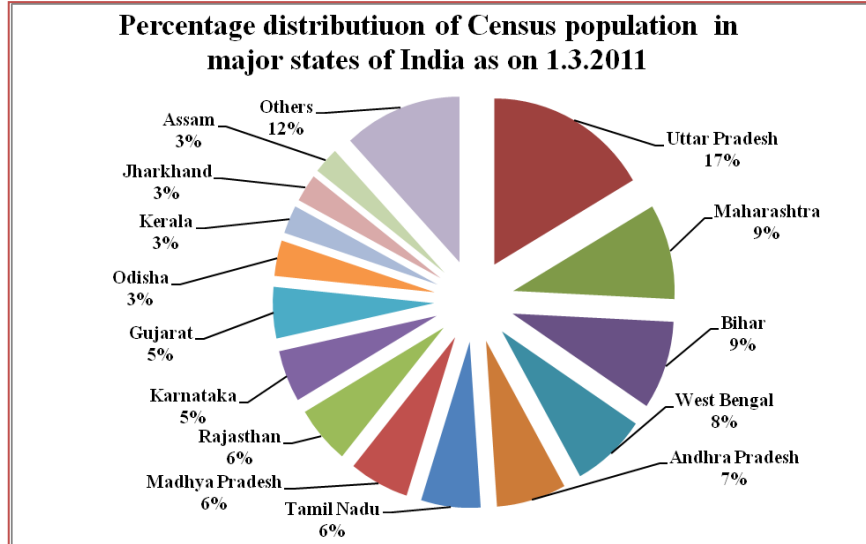


SECTION 8: POPULATION AND VITAL STATISTICS

This section includes abstracts of data on population and vital statistics of India based on the decadal census population. Demographic characteristics provide an overview of its population size, composition and the components of changes such as natality, mortality and social mobility. In addition to population statistics, vital statistics include indicators such as birth rate, death rate, natural growth rate, fertility rate, maternal mortality rate etc.

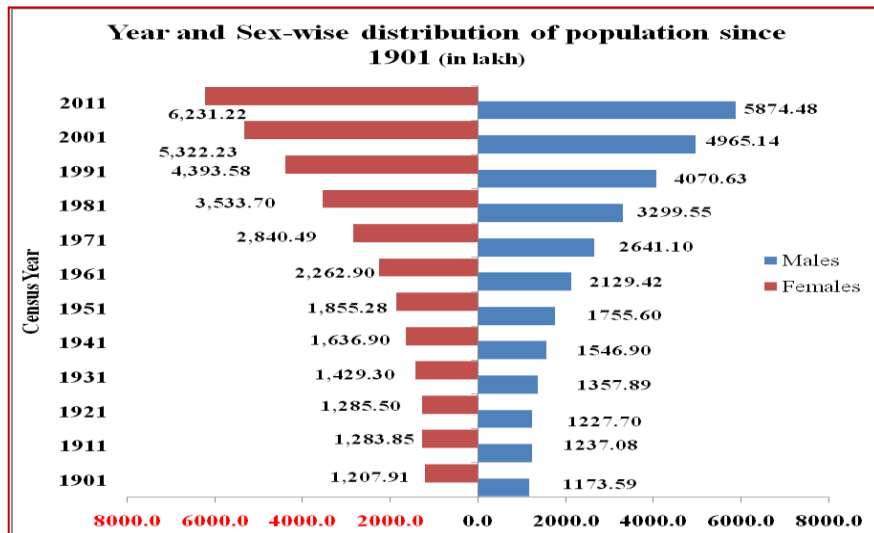
India's population is distributed across 29 States and 7 Union territories of varying population size, which as on 1st March 2011 stood at 12105.69 lakh (6231.22 lakh males and 5874.48 lakh females). Urban population was 31.2% of the total population as per 2011 Census. The projected population of India as on 01.03.2021 and 01.03.2026 are approximately 13400 and 14000 lakhs respectively.



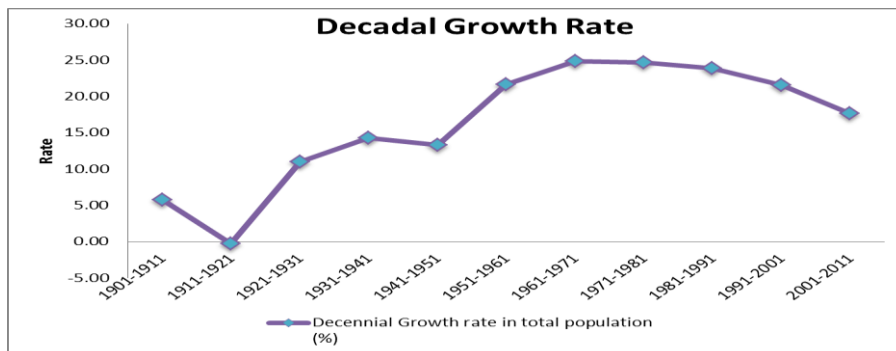
Growth in Indian Population:

The population of India rose from 3610.88 lakh in 1951 to 12105.69 lakh in 2011. The exponential growth rate of the population, which is an indicator of annual average rate of change of population, peaked at 2.2% during the decades 1961-71 and 1971-81.

The growth rate declined marginally to 2.1% in 1981-91 and to 1.6% in 2001-2011. Both male and female populations had grown annually at an



average exponential growth rate of 2.0% over the period 1951-2011. Population growth in India has been rapid and has important implications for social and economic development and quality of life. A substantial growth in the population of the country is almost inevitable.

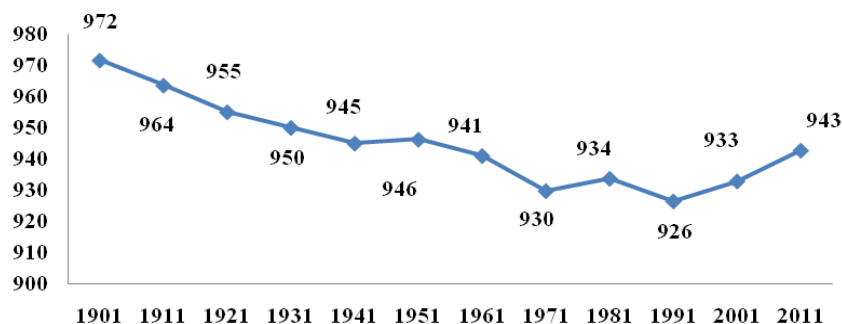


Sex-Ratio of Indian Population:

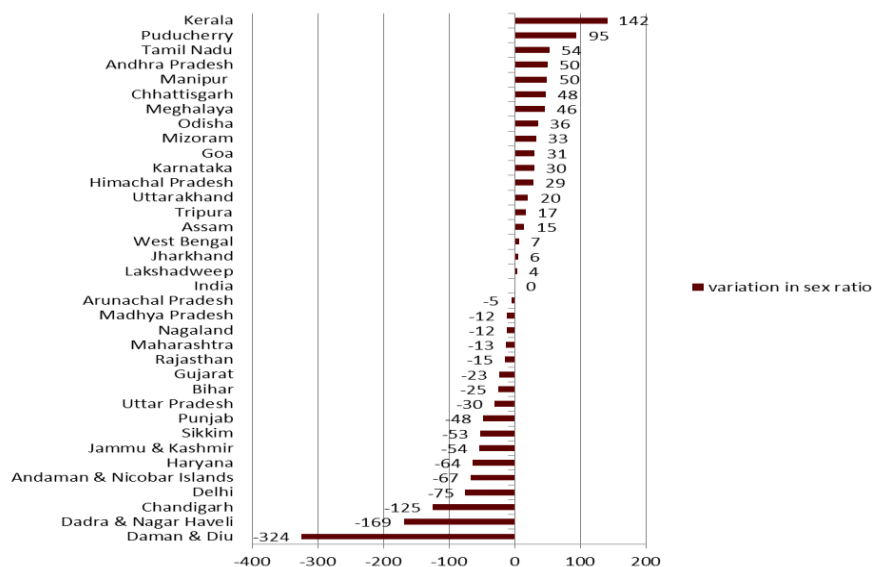
The sex ratio in India had been unfavourable to the females. The female to male sex ratio had declined substantially since the beginning of the century, resulting in a substantial female deficit in the population. The sex ratio declined from 972 in 1901 to 930 in 1971, but it had remained fairly the same since then. The country had improved sex ratio during 2001-2011 censuses from 933 to 943 females per thousand males over the last decade.

An important feature of the population sex ratio in India is its regional variations that have persisted over time. The sex ratio in Kerala is the highest and the lowest in Daman & Diu.

Year-wise number of Females per 1000 males



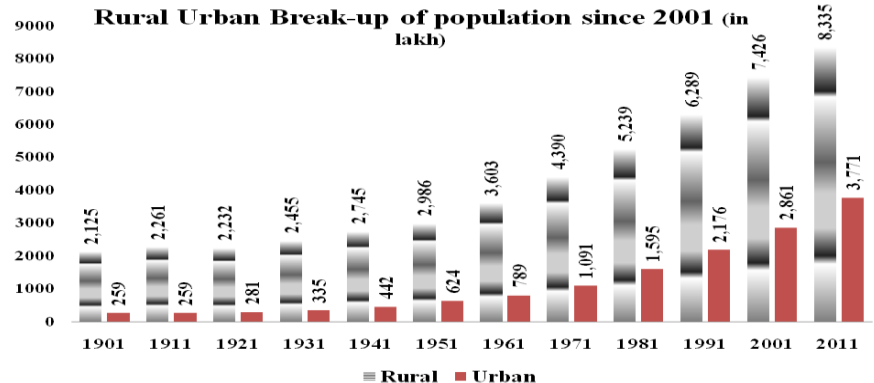
Variation of Sex ratio in Indian States/UT's against India's Sex Ratio 943



Urbanisation of Indian Population:

The process of urbanisation had rather been slow in India upto 1941, thereafter, urbanization accelerated. The urban population in India was 624.44 lakh at the first Census after Independence, which increased to 3771 lakh in 2011. The proportion of urban population had increased from

Rural Urban Break-up of population since 2001 (in lakh)

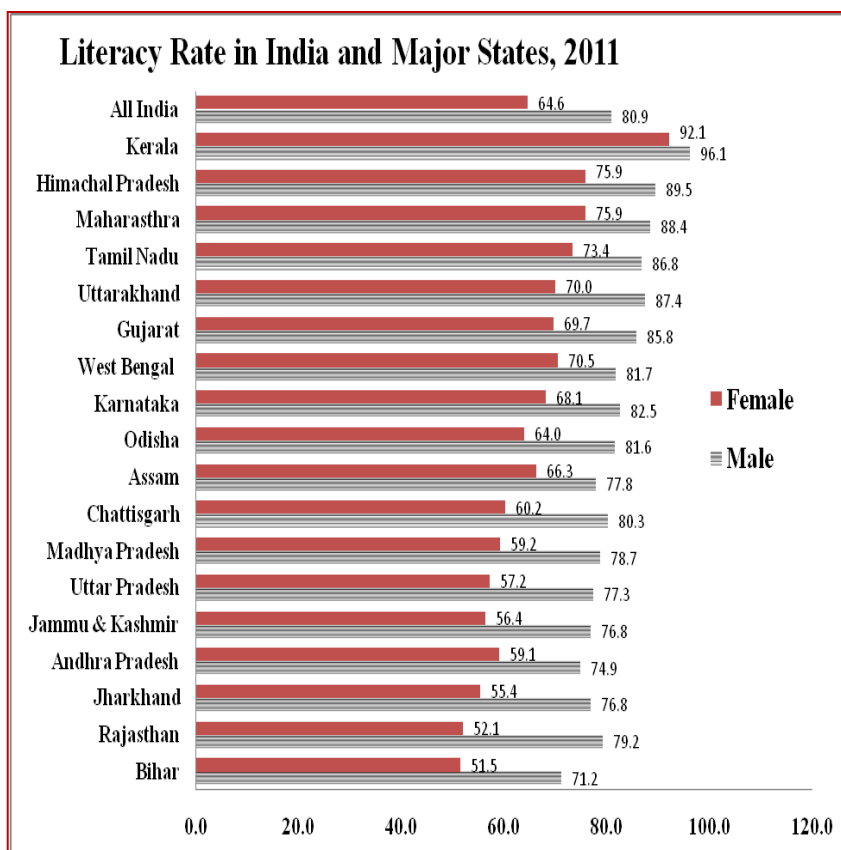


17.3% in 1951 to 31.2% in 2011. This indicates a relatively low pace of urbanisation in the country. The exponential growth rate of urban population over the period 1951-2011 peaked at 3.0%. Since then, the urban growth rate had been accelerating to 2.74% in 1991-2001 and to 2.76% in 2001-2011.

The level of urbanisation varies widely across states and union territories. The level of urbanisation is higher in all union territories than national level. The states and union territories having about more than or equal to 50% of its population living in the urban areas in 2011 were Delhi (97.50%), Chandigarh (97.25%), Puducherry (68.33%), Goa (62.17%), Mizoram (52.11%), Daman & Diu (75.17%) and Lakshadweep (78.07%). The states and union territories having more than or equal to 25% to less than 50% of its population living in urban areas were Andhra Pradesh (33.36%), Gujarat (42.60%), Haryana (34.88%), Jammu & Kashmir (27.38%), Karnataka (38.67%), Kerala (47.70%), Madhya Pradesh (27.63%), Maharashtra (45.22%), Manipur (32.45%), Nagaland (28.86%), Punjab (37.48%), Tamil Nadu (48.40%), Tripura (26.17%), Uttarakhand (30.23%), West Bengal (31.87%), Andaman & Nicobar Islands (37.70%) and Dadra & Nagar Haveli (46.72%). The states and union territories having more than or equal to 15% to less than 25% of its population living in the urban areas were Arunachal Pradesh (22.94%), Chhattisgarh (23.24%), Jharkhand (24.05%), Meghalaya (20.07%), Odisha (16.69%), Rajasthan (24.87%) and Uttar Pradesh (22.27%). The remaining states are less urbanized having less than 15% urban population.

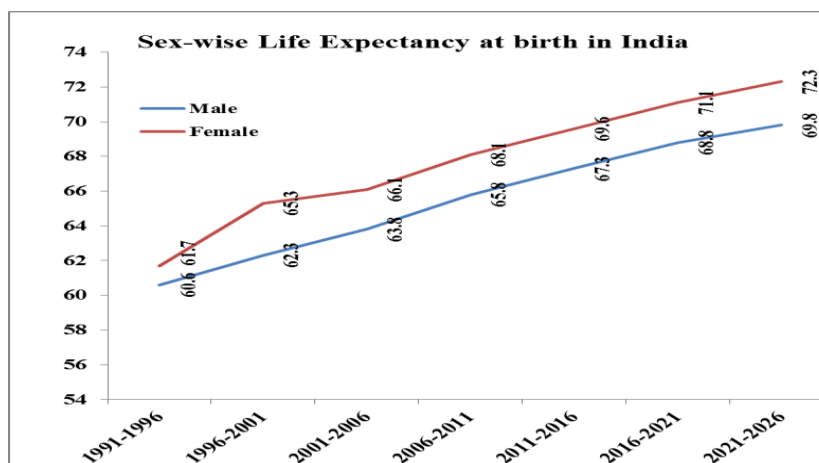
Literacy Rate of Indian Population:

Literacy had increased substantially over time, but the education levels vary widely throughout India. The literacy rate in the country had shown an increase of 9.2% during the decade 2001-2011. As per 2011 Census, 73.0% of the population was literate. The male literacy rate was higher (80.9%) in comparison to female literacy rate which was 64.6%. The level of literacy as per 2011 Census among the major States of India is depicted in the graph. The literacy rate (population aged 7 years and above) in the states is above than India level (73) are Delhi (86), Goa (89), Gujarat (78), Haryana (76), Himachal Pradesh (83), Karnataka (75), Kerala (94), Maharashtra (82), Manipur (79), Mizoram (91), Nagaland (80), Punjab (76), Sikkim (81), Tamil Nadu (80), Tripura (87), Uttarakhand (79), West Bengal (76), A&N Islands (87), Chandigarh (86), D&N Haveli (76), Daman & Diu (87), Lakshadweep (92) and Puducherry (86).



Life Expectancy in India:

Life Expectancy is one of the most preferred indicators in demographic and health analysis. It has been defined as the average number of years that a new born could expect to live, if he/she were to pass through life exposed to the age and sex-specific death rates prevailing at the time of his/her birth, for a specific year. Besides, Life Expectancy at birth is used in construction of a dimensional index of health



in Human Development Index (HDI) and Gender Development Index (GDI). The life expectancy at birth had been increasing for both males and females. In 2001-2006, the life expectancy of male population was 63.8 years and for female population was 66.1 years. The life expectancy of female population had increased up-to 68.1 years and for male 65.8 in 2006-2011. This is an indication that there had been an improvement in the mortality situation for both males and females.

Some Concepts and Definitions:

Still Birth:

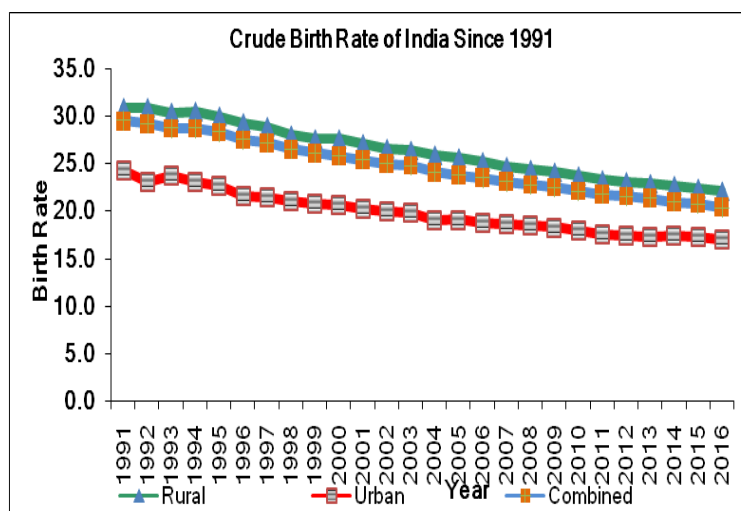
A stillborn baby is legally defined as a baby born after the 24th week of pregnancy who did not show any signs of life at any time after being born. If there were no signs of life before 24 weeks, it is known as miscarriage.

Live Birth:

A live birth occurs when a foetus, whatever its gestational age, exits the maternal body and subsequently shows any sign of life, such as voluntary movement, heartbeat, or pulsation of the umbilical cord, for however brief a time and regardless of whether the umbilical cord or placenta are intact.

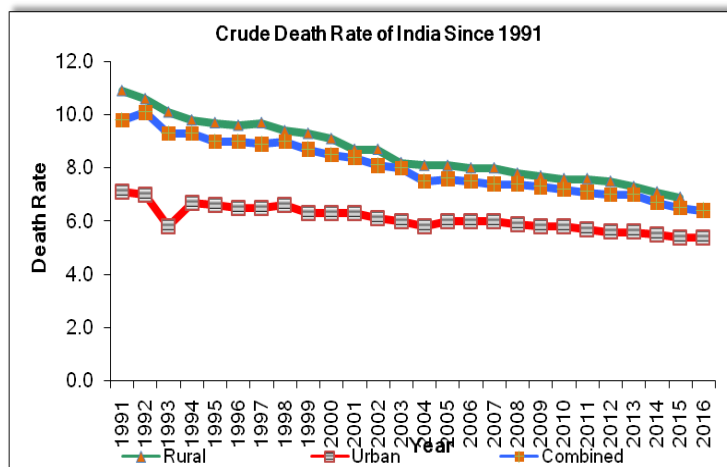
Crude Birth Rate:

The Crude Birth Rate (CBR) is defined as the number of live births in a year per thousand of the mid-year population. The birth rate declined from 29.5 in 1991 to 20.4 in 2016. The birth rate of rural population had declined from 30.9 in 1991 to 22.1 in 2016, whereas, the birth rate of urban population had declined from 24.3 in 1991 to 17.0 in 2016.



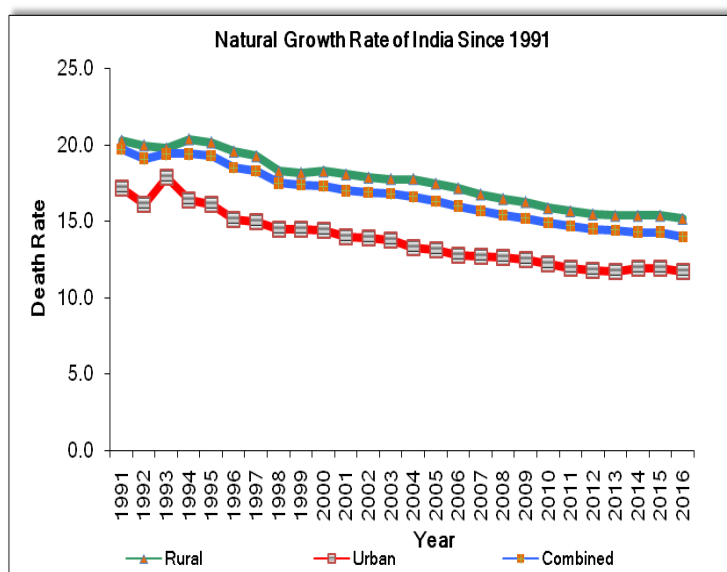
Crude Death Rate:

The crude death rate (CDR) is measured as the ratio of the number of deaths in a year to one thousand of the midyear population. CDR in the country declined marginally during the period 1991-2016, from 9.8 in 1991 to 6.4 in 2016. The death rate of rural population had declined from 10.6 in 1991 to 6.9 in 2016, whereas, the death rate of urban population had declined from 7.1 in 1991 to 5.4 per thousand populations in 2016.



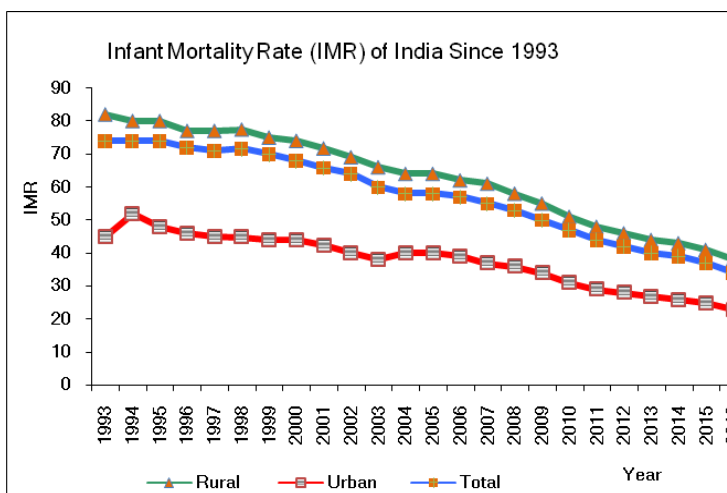
Natural Growth Rate:

The Natural growth rate in population is measured by the difference of birth rate to death rate. It indicates the natural growth of population of a country. The Natural growth rates declined during the period 1991-2016 from 19.7 in 1991 to 14.0 per thousand populations in 2016. The Natural growth rate of rural population had declined from 20.3 in 1991 to 15.2 per thousand populations in 2016 whereas, for urban population, it had declined from 17.2 in 1991 to 11.7 per thousand populations in 2016. The population, however, continued to grow as the decline in birth rate is not as rapid as the decline in the death rate.



Infant Mortality Rate:

The Infant mortality rate (IMR) is defined as the number of infant deaths in a year per 1,000 live births during the same year. The infant mortality rate in the country has shown a declining trend during the period 1993-2016. IMR had declined from 74 per thousand live births in 1993 to 34 per thousand live births in 2016. The IMR of rural population had declined from 82 per thousand live births in 1993 to 38 per thousand live births in 2016, whereas, the IMR of urban population had declined from 45 per thousand live births in 1993 to 23 per thousand live births in 2016.

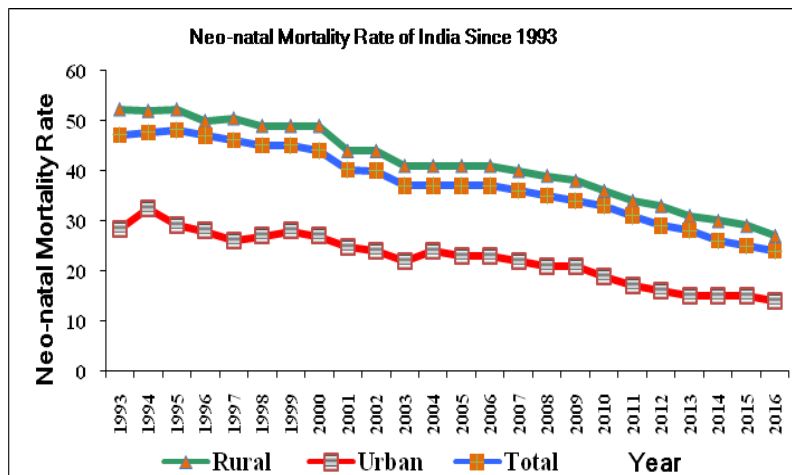


The IMR had steadily been declining though it had been higher in rural areas.

Neo-natal Mortality Rate:

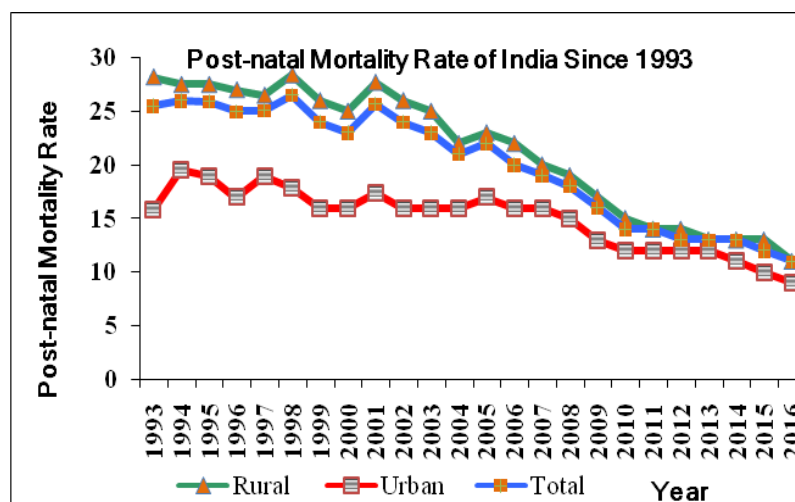
The neo-natal mortality rate is measured as the ratio of number of deaths of infant of age less than 29 days to one thousand live births in that year. The Neo-natal mortality rate in the country has also shown a declining trend during the period 1993-2016, from 47.1 in 1993 to 24.0 per thousand live births in 2016. The Neo-natal mortality rate of rural population had declined from 52.3 in 1993 to 27.0 per thousand live births in 2016,

whereas, for urban population, it had declined from 28.4 per thousand live births in 1993 to 14.0 per thousand live births in 2016.



Post-natal Mortality Rate:

The post-natal mortality rate is defined as the number of deaths of children between 29 days and one year of age in a given year per 1000 total live births in the same year. The Post-natal mortality rate of India declined from 25.5 in 1993 to 11.0 per thousand live births in 2016. The Post-natal mortality rate of rural population had declined from 28.2 per thousand live births in 1993 to 11.0 per thousand live births in 2016, whereas, for urban population, it had declined from 15.8 per thousand live births in 1993 to 9.0 per thousand live births in 2016.



Peri-natal Mortality Rate:

The peri-natal mortality rate is measured by the ratio of number of still births and infant deaths of age less than 7 days per thousands of live births and still births in a particular year. The Peri-natal mortality rate of India has declined from 44.2 per thousand live births in 1993 to 23 per thousand live births in 2016. The Peri-natal mortality rate of rural population had declined from 47.9 per thousand live births in 1993 to 26.0 per thousand live births in 2016, whereas, for urban population, it had declined from 31.0 per thousand live births in 1993 to 14.0 per thousand live births in 2016. It has been observed that Peri-natal mortality rate had been highest for rural mothers and for mothers with no education.

Still birth Rate:

The still birth rate is measured by the ratio of still births to one thousand still births and live births in a particular year. The Still birth rate has declined from 10.5 per thousand live births in 1993 to 4.0 per thousand live births in 2016. The Still birth rate of rural population had declined from 10.8 per thousand live births in 1993 to 5.0 per thousand live births in 2016, whereas, for urban population, it had declined from 9.3 per thousand live births in 1993 to 3.0 per thousand live births in 2016.

Total Fertility Rate:

Total Fertility Rate (TFR) signifies the total number of children an average woman will produce in her child bearing years. TFR is a useful indicator for analyzing the prospects for population stabilization. Fertility continued to remain same in India and TFR for the year 2014 and 2015 has been estimated as 2.3 and 2.3 per women respectively. TFR for the year 2016 has been the same i.e. 2.3. TFR for rural areas had been estimated as 1.7 per women, whereas, TFR for urban areas has been estimated as 1.3 per women. In 2000, the country established a new National Population Policy to stem the growth of the country's population. One of the primary goals of the policy was to reduce the total fertility rate to 2.1 by 2010. Fertility in India continues to be above the replacement level. In 2016, a woman in India produced, on average, 2.3 births during her entire reproductive life, which is well above the replacement level of 2.1 births per women.

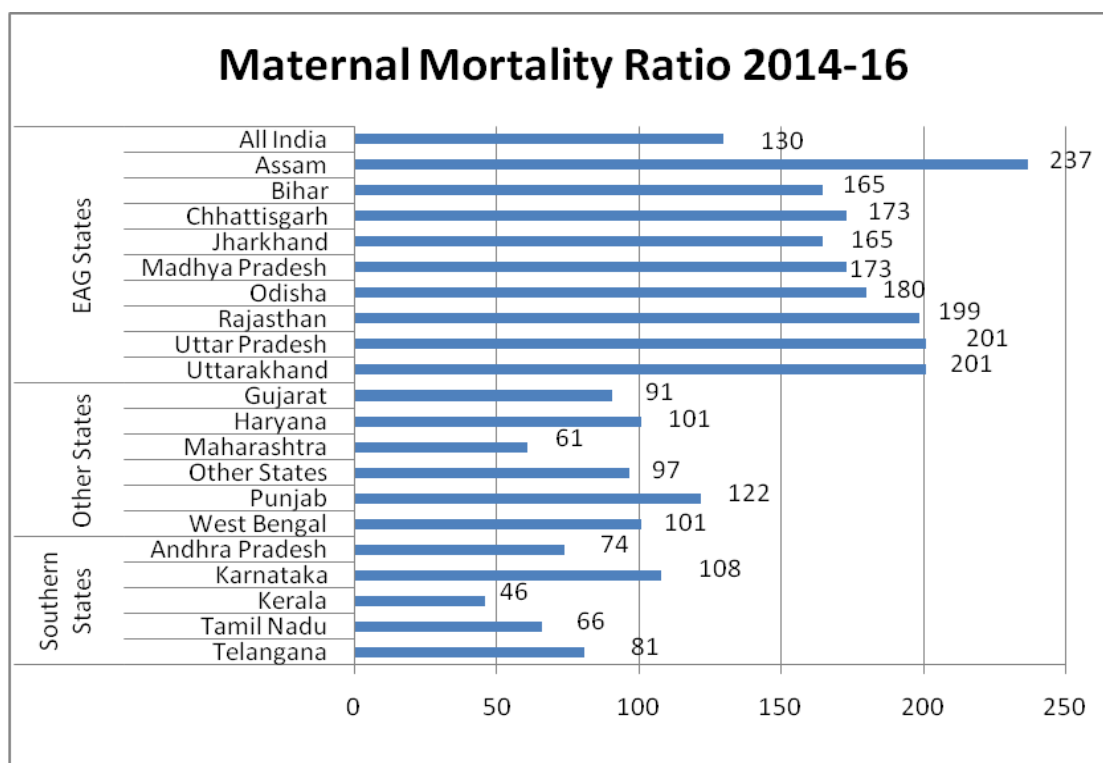
Maternal Mortality Ratio (MMR)

Maternal Mortality Ratio (MMR) refer to the number of women who die as a result of complication of pregnancy or childbearing in a given year per 100,000 live births in that year.. It is considered a primary and important indicator of a geographic area's overall status or quality of life.

The States have been categorized into three group namely,

- “Empowered Action Group” (EAG) States comprising Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, Rajasthan, Uttar Pradesh & Uttarakhand and Assam
- “Southern States” which include Andhra Pradesh, Telagana, Karnataka, Kerala and Tamil Nadu and
- “Other States” covering the remaining States/UTs

The decline has been most significant in EAG States & Assam from 246 to 188. Among the Southern States, the decline has been from 93 to 77 and in the Other States from 115 to 93. Kerala has the lowest MMR of 46 among other states, while Assam records the highest MMR in the country followed by Uttar Pradesh & Uttarakhand and Rajasthan. Overall MMR of India has declined from 167 in 2011-13 to 130 in 2014-16.



In 2011-13, decline was most significant in EAG States & Assam from 257 to 246. Among the Southern States, the decline has been from 105 to 93 and in the Other States from 127 to 115. Kerala has the lowest MMR of 61 among other states, while Assam records the highest MMR in the country followed by Uttar Pradesh & Uttarakhand and Rajasthan. Overall MMR of India has declined from 178 in 2010-12 to 167 in 2011-13.

Similarly in 2010-12, decline was from 308 to 257 in EAG States & Assam. Among the Southern States, the decline has been from 127 to 105 and in the Other States from 149 to 127. Kerala has the lowest MMR of 66 among other states, while Assam records the highest MMR in the country followed by Uttar Pradesh & Uttarakhand and Rajasthan. Overall MMR of India has declined from 212 in 2007-09 to 178 in 2010-12.

Thus, the maternal mortality ratio of India has continuously declined from 212 in 2007-09 to 130 per thousand live births in 2014-16 shows gradual improvement in MMR.

