

# Social Issues

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स्वास्थ्य एवं परिवार कल्याण मंत्रालय

**MINISTRY OF HEALTH & FAMILY WELFARE**

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DEPARTMENT OF HEALTH & FAMILY WELFARE

India's impressive progress towards achieving replacement rate-level Total Fertility Rate (TFR) deserves much wider recognition in India and globally.

TFR measures the average number of children born to a woman in her reproductive years in a given jurisdiction. A value of 2.15 is widely regarded to be the replacement level which, if sustained and assuming no net migration, will lead to a stable population size over time.

Table 1 provides official trends in TFR by residence for India and for selected States for four years between 2000 and 2016, on the basis of which the following observations may be made:

(i) India's overall TFR declined by 0.9 points between 2000 and 2016, recording a value of 2.3 in 2016. Each of the 22 states reported in Table 1 exhibited declines in TFR. In no state was TFR increasing. These trends strongly suggest that India should be able to, conservatively, achieve the globally-used replacement level of TFR of 2.15 by 2019.

(ii) More remarkably, 13 out of 22 states for which data are available for 2016, and possessing a population share of about 47 per cent in total, exhibited TFR that is significantly below the replacement rate, i.e. between 1.6 and 2.0. These states are from every part of the country: North – Delhi, Himachal Pradesh, Punjab, Uttarakhand, Jammu and Kashmir; West – Maharashtra; East – Odisha, West Bengal; and South – Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu. Thus, low TFR cannot be regarded as being an exclusive characteristic of any one region, such as the southern region.

(iii) There are three states located in the East, West and North, with a population share of about 10 per cent, which exhibit TFR at the near-replacement level, i.e. between 2.2 and 2.3. Thus, nearly three-fifths of India's population is exhibiting below or near-replacement TFR.

(iv) There are six states, located in the East, West and North, with a population share of 42 per cent, which exhibit significantly higher-than-replacement TFR levels. However, the decline in TFR in Uttar Pradesh, with a population share of 16.5 per cent, from 4.7 to 3.1 (a decline of 1.6) is nearly twice that of the national average. Similarly, the TFR decline of 1.4 in Rajasthan and 1.2 in Bihar, with a population share of 5.7 and 8.6 per cent percent, is between one-third and one-half above the national average.

The Table below shows the state wide state in detail:

Table 1: Trends in Total Fertility Rate by Residence					
India and Selected States, 2000 to 2016					
Year	2000	2005	2011	2016	Change in TFR (2000-2016)
India	3.2	2.9	2.4	2.3	-0.9
States below TFR in 2016					
Andhra Pradesh	2.3	2.0	1.8	1.7	-0.5
Delhi	NA	2.1	1.8	1.6	NA
Himachal Pradesh	2.3	2.2	1.8	1.7	-0.6
Jammu & Kashmir	NA	2.2	1.8	1.7	NA
Karnataka	2.4	2.2	1.9	1.8	-0.6
Kerala	1.9	1.7	1.8	1.8	-0.1
Maharashtra	2.5	2.2	1.8	1.8	-0.7
Odisha	2.8	2.6	2.2	2.0	-0.8
Punjab	2.4	2.1	1.8	1.7	-0.7
Tamil Nadu	2.1	1.7	1.7	1.6	-0.5
Telangana	NA	NA	NA	1.7	NA
Uttarakhand	NA	2.6	2.1	1.9	NA
West Bengal	2.4	2.1	1.7	1.6	-0.8
States with near-replacement TFR in 2016					
Assam	3.1	2.9	2.4	2.3	-0.8
Gujarat	2.9	2.8	2.4	2.2	-0.7
Haryana	3.2	2.8	2.3	2.3	-0.9
States with higher-than-replacement TFR in 2016					
Bihar	4.5	4.3	3.6	3.3	-1.2
Chhattisgarh	NA	3.4	2.7	2.5	NA
Jharkhand	NA	3.5	2.9	2.6	NA
Madhya Pradesh	4.0	3.6	3.1	2.8	-1.2
Rajasthan	4.1	3.7	3.0	2.7	-1.4
Uttar Pradesh	4.7	4.2	3.4	3.1	-1.6
Notes:					
a. TFR measures the average number of child births of a woman during her reproductive years.					
b. Replacement rate TFR = 2.15. At this rate, the population stabilises with a substantial lag, assuming no net immigration. Below it, the population declines and ages rapidly. Above it, the population increases, with a lower share of elderly in the population.					
Source: Calculated from Sample Registration Survey, Ministry of Home Affairs, India					
Retrieved from: <a href="http://niti.gov.in/content/total-fertility-rate-tfr-birth-woman">http://niti.gov.in/content/total-fertility-rate-tfr-birth-woman</a>					

With better governance, further improvements in growth rates and in livelihood opportunities, better public hygiene and infrastructure, including electricity, the prospects are for further declines in TFR in these three high fertility states. The Ministry of Health and Family Welfare has launched Mission Parivar Vikas in 146 high fertility districts (as of 2018, India has 712 districts) in states having high fertility rates. This should also assist in reducing their TFR.

Success in Uttar Pradesh in 2018 in immunizing every child in the State against Japanese Encephalitis and Acute Encephalitis Syndrome under the DASTAK campaign is likely to have indirect positive impact on reducing TFR in the State.

As the latter six states progress further in TFR reductions in the coming several years, India will be on the path of a stable, and eventually declining, population with all its implications for the country's growth strategy, need for improving labor and capital productivity, addressing ageing issues, and issues arising from internal migration across states. These will require considerable specialized research, with long-term focus. Thus, for addressing ageing issues, I have suggested establishing an Indian Centre for Research on Retirement Behavior (ICRRB).

### **Policy and Research Implications**

India and its various States exhibit a complex TFR trend with several policy and research implications, some of which are of a short-term and some are of a long-term nature. These two should not be viewed in isolation but in conjunction with each other.

A short-term policy implication arises from the Terms of Reference (TOR) of India's Fifteenth Finance Commission (15th FC). There is a provision for the Commission to propose measurable performance-based incentives for States at the appropriate level of government for efforts and progress made by the States in moving towards the replacement rate of population growth.

The 15th FC will need to consider how to measure 'performance' in moving towards a stable population. It will also need to decide what weight to give to this item as it forms only one of the nice areas for which performance-based incentives to States are to be provided.

As noted, in absolute terms, States with high fertility rates have succeeded in achieving much larger reductions than those States with initially lower fertility rates. Is such a measure relevant? What is the period over which such performance is to be measured, and what should be the unit for measuring performance: a District or the whole State?

As in other areas, the 15th FC will also need to review the quality of the TFR and other data across the units it selects, and suggest ways to strengthen them.

The second policy area concerns the implications of variations in TFR across and within States on economic and livelihood structures, and migration flows. This, along with reasons for TFR variations across the country (and across districts), will require much more rigorous research using newer demographic and sociological research methods, including data analytics.

Receptivity by policymakers and stakeholder communities, including the media, to utilizing

research in an outcome-oriented manner to advance the country's core interests will need to be substantially enhanced. This, in the current overtly contentious environment, will be quite challenging but should, nevertheless, be vigorously pursued, with support extended to those who are pursuing it.

It is now recognized that the quality of data in many areas, including for employment and livelihood trends, and for TFR and other demographic variables needs to be substantially improved if rigorous research is to make useful contributions to policies and outcomes in India.

The above analysis suggests that trends in TFR and other demographic variables have far-reaching short- and long-term implications. These require a mindset respectful of integrity in policy-related research, and in communicating its findings; and willingness to utilise research findings to better reach desired outcomes.

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