The skewed sex ratio could upset the gains from a falling fertility rate

There is an urgent need to reach young people both for reproductive health education and services as well as to cultivate gender equity norms. This could reduce the effect of population momentum and accelerate progress towards reaching a more normal sex-ratio at birth. India’s population future depends on it.

The SRS reports show that sex ratio at birth in India, measured as the number of females per 1,000 males, declined marginally from 906 in 2011 to 899 in 2018. (Illustration: C R Sasikumar)
Recently, there has been discussion in the media on India’s population future prompted by release of the Sample Registration System (SRS) Statistical Report (2018) and global population projections made by the Institute of Health Metrics and Evaluation (IHME), US.

Fertility has been declining in India for some time now. SRS report estimated the Total Fertility Rate (TFR), the number of children a mother would have at the current pattern of fertility during her lifetime, as 2.2 in the year 2018. Fertility is likely to continue to decline and it is estimated that replacement TFR of 2.1 would soon be, if not already, reached for India as a whole. As fertility declines, so does the population growth rate. This report estimated the natural annual population growth rate to be 1.38 per cent in 2018. With India’s estimated population of 137 crore, this means that net 1.9 crore persons would have been added that year.

A comparison of 2011 and 2018 SRS statistical reports shows that TFR declined from 2.4 to 2.2 during this period. Fertility declined in all major states. In 2011, 10 states had a fertility rate below the replacement rate. This increased to 14 states (including two new newly carved states — Telangana and Uttarakhand). The annual natural population growth rate also declined from 1.47 to 1.38 per cent during this period.

**Explained Ideas: Why India must urgently step up efforts to improve its sex ratio**

Many people believe that the population would stabilise or begin to reduce in a few years once replacement fertility is reached. This is not so because of the population momentum effect, a result of more people entering the reproductive age group of 15-49 years due to the past high-level of fertility. For instance, the replacement fertility level was reached in Kerala around 1990, but its annual population growth rate was 0.7 per cent in 2018, nearly 30 years later. The UN Population Division has estimated that India’s population would possibly peak at 161 crore around 2061 at the medium-fertility variant, and will be lower by about 10 per cent at the low fertility variant. Recently, IHME estimated that it will peak at 160 crore in 2048. Needless to add that estimates so far out in time have considerable uncertainty. Some of this momentum effect can be mitigated if young people delay childbearing and space their children.
Fertility has been declining in India for some time now. Source: Data on TFR and Illiterate women is from SSR Statistical Report 2018.

The six states with higher than national fertility rate (and their TFR) in 2018 are Bihar (3.2), Uttar Pradesh (2.9) Madhya Pradesh (2.7), Rajasthan (2.5), Jharkhand (2.5) and Chhattisgarh (2.4) (Table 1). Fertility largely depends upon social setting and programme strength. Female education is a key indicator for social setting. Broadly, higher the female education level, lower the fertility. For instance, illiterate women in the reproductive age group of 15-49 years have higher fertility than literate women in almost all states. The percentage of illiterate women in the reproductive age group declined from 31.5 in 2011 to 13.0 per cent in 2018 as the cohort of older women with high illiteracy exited and younger women with a high proportion of them literate entered this age group. The percentage of illiterate women in this age group was higher than 15 per cent in all the high-fertility states, which comprise nearly 40 per cent of India’s population. As the literacy of women in the reproductive age group is improving rapidly, we can be sanguine about continued fertility reduction.

Programme strength is indicated by the unmet need for contraception, which has several components. The most important of them is the proportion of married women who are neither pregnant nor amenorrhoeic and do not desire a child in the next two years or ever but are not practising contraception. The National Family Health Survey (2015-16) provides us estimates for the unmet need at 12.9 per cent and contraceptive prevalence of 53.5 per cent for India. Together, this puts the total demand for contraception at 66.4 per cent.

Bihar, with the highest fertility rate, also has the highest unmet need at 21.1 per cent and the lowest contraceptive prevalence rate of 24.1 per cent among all the major states. Although female education levels are improving in Bihar, fertility for women with any education level is higher in...
Fertility has been declining in India for some time now. The programme is somewhat stronger in UP as unmet need is 18 per cent and contraceptive prevalence is 45.5 per cent. Strangely, fertility among women with Class 10 or higher education in UP is greater in 2018 compared to 2011. Programmes in these two states need to respond to this. Programme’s ability to reach younger people and provide them with good quality reproductive health education and services needs to be urgently strengthened in these states.

The most troubling statistics in the report are for sex ratio at birth. Biologically normal sex ratio at birth is 1,050 males to 1,000 females or 950 females to 1,000 males. The SRS reports show that sex ratio at birth in India, measured as the number of females per 1,000 males, declined marginally from 906 in 2011 to 899 in 2018. There is considerable son preference in all states, except possibly in Kerala and Chhattisgarh. The UNFPA State of World Population 2020 estimated the sex ratio at birth in India as 910, lower than all the countries in the world except China. This is a cause for concern because this adverse ratio results in a gross imbalance in the number of men and women and its inevitable impact on marriage systems as well as other harms to women.

Thus, much more attention is needed on this issue. Increasing female education and economic prosperity help to improve the ratio. It is hoped that a balanced sex ratio at birth could be realised over time, although this does not seem to be happening during the period 2011-18. In view of the complexity of son preference resulting in gender-biased sex selection, government actions need to be supplemented by improving women’s status in the society.

In conclusion, there is an urgent need to reach young people both for reproductive health education and services as well as to cultivate gender equity norms. This could reduce the effect of population momentum and accelerate progress towards reaching a more normal sex-ratio at birth. India’s population future depends on it.

This article first appeared in the print edition on October 17 under the title “The real population worry.” Rangarajan is former Chairman, Prime Minister’s Economic Advisory Council and former Governor, Reserve Bank of India. Satia is Professor Emeritus, Indian Institute of Public Health, Gandhinagar.