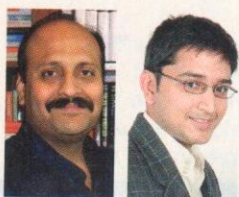


Demographic dividend

Understanding India's age-group profile and how to make the best use of it for economic growth



Dr Amit Kapoor and Sankalp Sharma

At present India possesses a significant demographic dividend. In this article we focus on dependence ratios and demographic shifts that can be expected in various states till 2026. Following this we turn to the change in dependence ratios, that is, both child dependence ratios and aged dependence ratios and their impact on the overall growth story of India. Lastly, we do a broad level categorization and turn to the governance policies that need to be formulated to ensure that the demographic dividend that India possesses at present does not turn into a demographic disaster.

A dependent in demographic terms is defined as a person who is either a child (0-14 years age bracket) or an elderly (65 and above age bracket). Dependence ratios are tools to understand the ratio of dependents in a population to the working age population. A higher dependence ratio means there is an additional burden on the working age population to cater to the needs of these dependents. The child dependence ratios (defined as 100 multiplied by the number of children from 0-14 age group divided by the number of people in 14-65 age group) tell us the ratio of children in the population to the working age population. At present most states have a high child dependence ratio. This is a significant burden but will be a dividend in the near future (if proper policies are made) when these children enter the working age population.

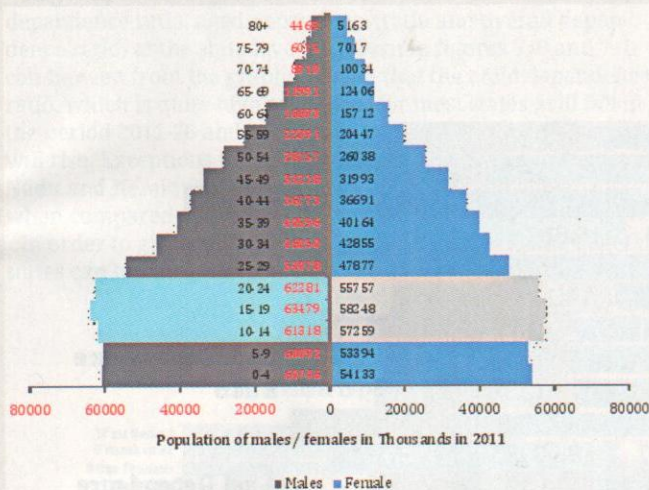
The aged dependence ratio (defined as 100 multiplied by the number of old from 65 and above age group / the number of people in 14-65 age group) is the ratio of elderly people to the working age population. At present most states have a low aged

dependence ratio. With rise in life expectancy and better health-care facilities aged dependence ratios for India will rise. A demographic dividend opportunity presents itself when the relatively high number of child dependents enter the working age population and are suitably employed. Some countries take a great advantage of this opportunity to unleash a huge growth trajectory. According to one estimate one third of growth in the "East Asia Miracles" came from demographic dividends. (Bloom, D and J Williamson, 1998. "Demographic Transitions and Economic Miracles in Emerging Asia." World Bank Economic Review 12: 419-456.)

Digging below the surface of the Indian demographic transition reveals a very interesting picture. The age pyramid is a powerful tool to understand the age distribution of a population. A near perfect pyramid as shown in figure 1 with the widest base shows that there are a very large number of children in the population. However, in India's case the maximum number of people (both male and female) is in the age bracket of 10-24 years. Thus, we can easily interpret a decline in the birth rates that have caused population in the age bracket 10-24 years to be the largest. With time these people are going to enter the labour force (some of them already have). And the population pyramid would subsequently look like the ones shown in figures 2, 3 and 4.

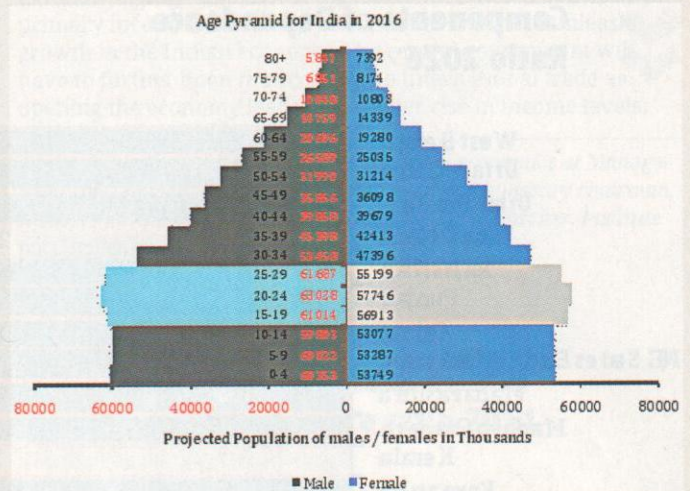
Roughly the outward bulge will start to move up the pyramid as more and more people enter the labour force population bracket (15-64 years). Subsequently larger age bracket populations will shift from the 50-65 brackets to the 65 and above bracket. This will cause aged dependence ratios to rise.

Fig 1: Age pyramid for India in 2011



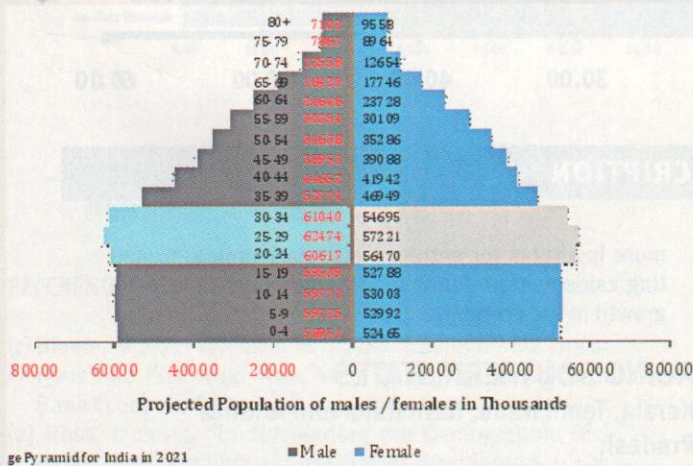
Source: Census of India and National Commission on Population, May 2006

Age pyramid for India in 2016



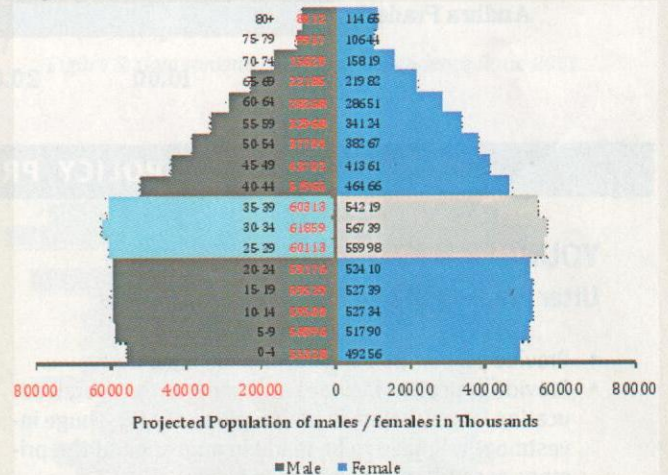
Source: Census of India and National Commission on Population, May 2006

Age pyramid for India in 2021



Source: Census of India and National Commission on Population, May 2006

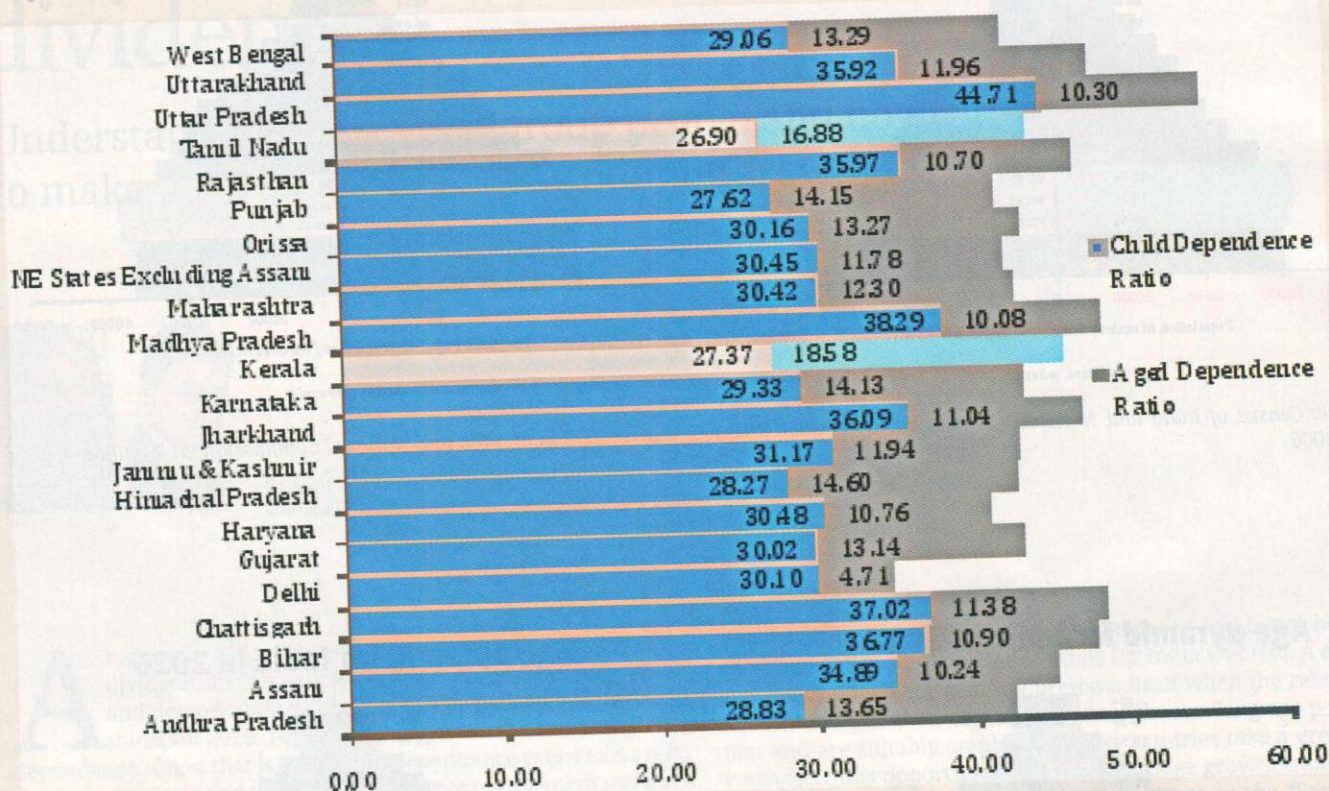
Age pyramid for India in 2026



Source: Census of India and National Commission on Population, May 2006

The figure below depicts the change in overall age dependence ratios. For most states these will fall which could result in unleashing the growth in these parts of India if proper policies are put in place.

Components of Dependence Ratio 2026



POLICY PRESCRIPTION

YOUNGER NORTHERN STATES

Uttar Pradesh, Rajasthan and Uttarakhand

- Provide proper food and nutrition to the young.
- Provide education facilities and improve the overall education infrastructure in their regions. For this, huge investment will have to be made in education at the primary, secondary and university levels.
- Provide skill-based education to people in the working age population.
- Provide jobs to people who are moving into the working age group.
- Provide incentives for people who want to become entrepreneurs. Incentives could range from setting up

more institutes for entrepreneurship learning, to setting aside venture funds for entrepreneurs to unleash growth in the economy.

AGING SOUTHERN STATES

Kerala, Tamil Nadu, Karnataka and Andhra Pradesh

- Improve the overall health infrastructure (for people moving into the old age bracket).
- Find unique models for healthcare delivery to people in these states.
- Increase the working age from 65 to 70-75 years.