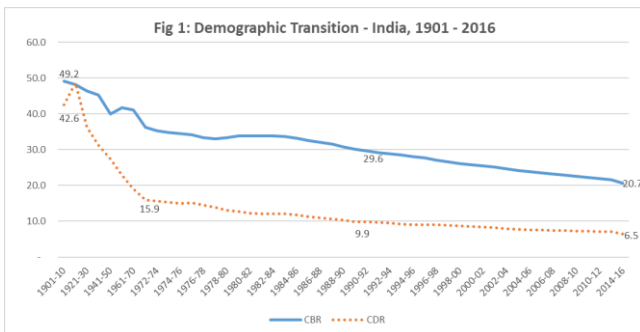


# Harnessing India's Demographic Dividend

## A Differential Approach for Sustainable Development

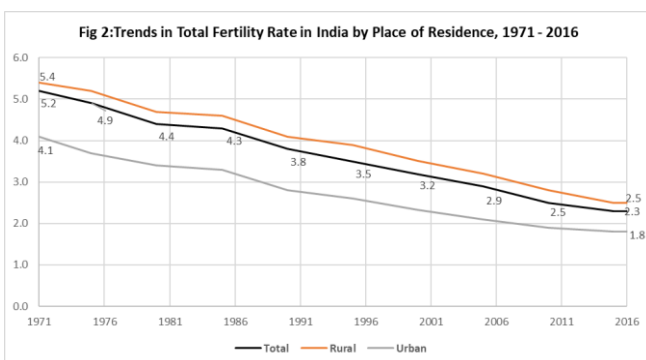
The twentieth century has witnessed remarkable changes in India's demographic arena. The population has increased by four times; from 238 million at the beginning of the century, to one billion at the end of it, and currently it is around 1.3 billion.

A steep fall in mortality was observed, especially during the middle of the century, without much decline in fertility for the first few decades. Consequently, the rate of population growth was initially low, but accelerated after the 1950s, rising to two percent per annum (Fig 1).



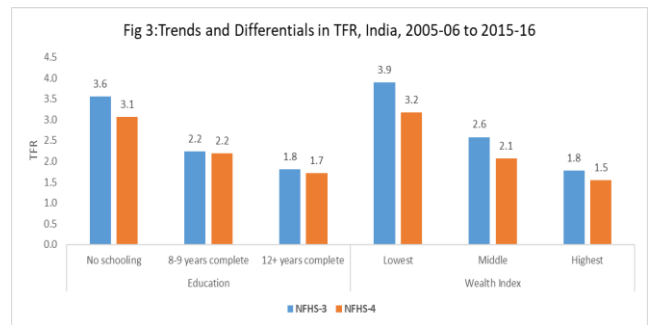
At the national level, the most recent census of 2011 has confirmed that although population continues to grow, the rate of growth has declined substantially. Clearly, India has passed through a classical demographic transition, a process experienced by many populations of the world, at different times and at varying paces.

After independence, fertility stalled through the late 1970s to the mid-1980s, but since then the decline has been smooth. The Total Fertility Rate (TFR) has come down from more than 5 children per woman in 1971, to 2.3 by 2016, close to achieving the replacement level (Fig 2).



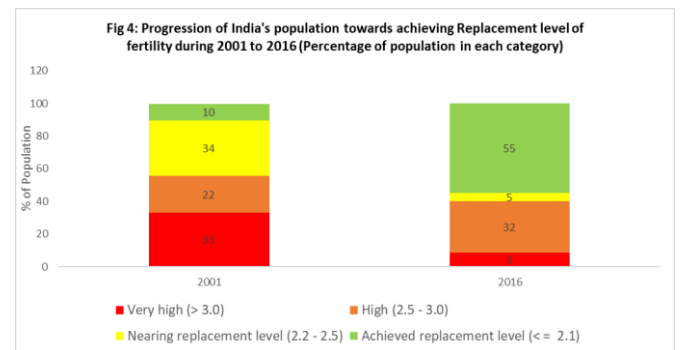
Fertility differs on the basis of socioeconomic background of women. In India, the fertility decline has been taking place across the board - among all sections of the society, the poor and the rich, those educated or not, residents of villages or cities. It also suggests narrowing

<sup>1</sup> Dependency ratio is the ratio of the population of young (0-14 years) and old (60+ years) to the population in working ages (15-59 years), usually expressed in percentage terms.



of socioeconomic gaps in fertility, even though some groups are ahead of the others (Fig 3).

The progression towards achieving replacement level of fertility over the past one and half decades indicates that 55% of India's population lives in states that have already achieved replacement level of fertility (18 bigger states in 2016, with TFR equal or less than 2.1 children), a remarkable achievement from only 10% of population in this category in 2001 (Fig 4).



Another one third of the nation's population has TFR between 2.5 to 3, while around 10% of the population (from one state - Bihar), has fertility level of 3 or more children per woman.

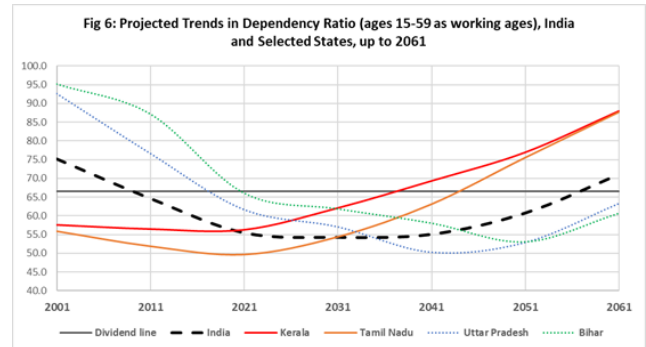
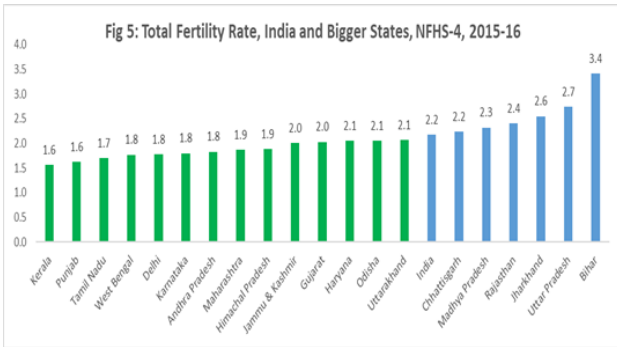
The pace of demographic transition varies across states. States in the southern part of the country and a few from other regions, are advanced in reducing fertility (Fig 5) and mortality, and are much ahead in terms of demographic transition. This has yielded a demographic divide, with major intra-country implications on demographic benefits that vary between groups of states.

An important consequence of this rapid fertility decline is the accruing of demographic dividend due to rise in the share of working age population, implying a fall in the dependency ratio<sup>1</sup>, these two are reciprocal in nature. After a decline in fertility, the share of working age population increases but after some time, it declines as the share of elderly rises. The period during which the dependency ratio is low, is the period of demographic

dividend (window of opportunity). Once this period of opportunity passes, the dividend is no longer available.

When the working age is taken as 15-59 years, the

Haryana, Assam, Chhattisgarh and Uttarakhand had also begun to derive dividend. Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Bihar lagged further behind and it will be only by 2021, that these



dependency ratio of less than two-thirds (67 per cent) is considered advantageous, and the demographic dividend accrues<sup>2</sup> at this stage.

The dependency ratio in India was quite high, at 75 per cent, in 2001, but fell to 65 per cent by 2011. Thus, the window of opportunity has already begun to open. The projected dependency ratio will fall further, to 55 per cent by 2021, and remain around that level for about 20 years. This window of opportunity will gradually narrow in 2041 (Fig 6) and close in 2061, when the dependency ratio would rise above the critical 67 percent<sup>3</sup>.

This window of opportunity varies from one group of states to another. States, ahead in the demographic transition, have begun to gain dividend early, but will lose it in the next three to four decades. Kerala and Tamil Nadu, the leaders among these, will lose the dividend sooner, before 2040 (Fig 7), whereas the rest will do so around the mid-2040s. These states include Delhi, Andhra Pradesh, Gujarat and Karnataka, which had ratios below 67 per cent in 2001 and later be joined by Himachal Pradesh, West Bengal, Punjab, and Maharashtra. The dependency ratio was rapidly declining and by 2011 some of these states, viz. Odisha,

states will have a dependency ratio below two thirds.

The analysis of the end period of a fully opened window phase<sup>4</sup> reveals that a group of states will have the window narrowing in less than five years from now. This will be followed by another group of states where the window will close by a decade. The rest of states will witness a fully open window during the decade 2041-2051.

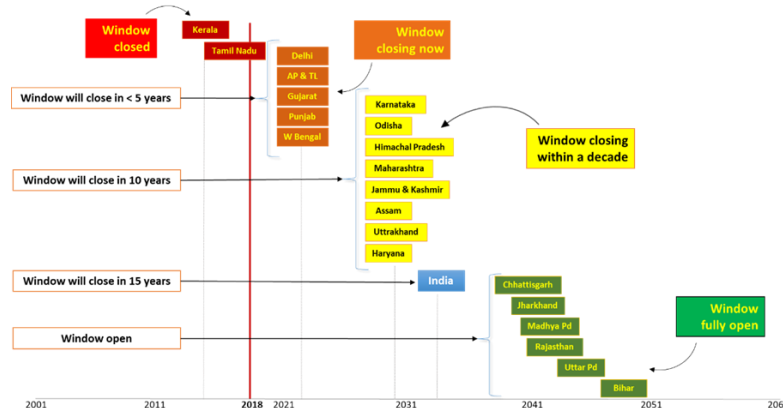
### Contours of India's future growth

Three demographic factors will be critical in shaping the future growth trajectory and realising the demographic dividend: age, location and gender.

#### Age

Today, every fifth person in India is an adolescent (10-19 years) and every third - a young person (10-24 years). Every year, approximately 12-14 million people will be entering into the workforce, largely from the northern states. The future demographic, social, economic and political development of the entire population will largely depend upon investments into the health, education and technical skills of this age group, to leverage the nation's competitive advantage - its demographic dividend.

Fig 7: Demographic Window of Opportunity among Indian States, 2001-2061 [End of fully-opened window phase]



<sup>2</sup> The threshold level of low dependency ratio, to be considered advantageous, is derived from the stationary age distributions in model life table (four Coale-Demeny and five UN model tables). The share of working age population hovers around 60 percent in the middle and high life expectancy range and then declines at very high life expectancy. Therefore, when the dependency ratio is less than 40 percent or two-thirds (40/60), the dividend may be said to accrue.

<sup>3</sup> 'An Assessment of Demographic Dividend in India and its Large States' by P. M. Kulkarni, 2017. A study commissioned by UNFPA

<sup>4</sup> The cut-off for end of fully opened window phase is taken as dependency ratio below two thirds but starts increasing

While the focus should be on the young, as an inevitable consequence of demographic transition, the share and number of elderly population (60+ years) is ultimately bound to increase. The size of elderly population will nearly double to touch 192 million by 2030, largely in southern and western states. By 2050, every fifth Indian will be an elderly person, hence planning for this segment also deserves equal attention. The health and economic security of the elderly will need to gain primacy.

#### Location

Nearly one third of India's population (377 million constituting 31 per cent) lives in urban areas. For the first time, between 2001 to 2011 census period, the absolute size of population increase was more in urban than rural areas. The level of urbanisation is higher in six demographically advanced states<sup>5</sup>, located mostly in western and southern regions, accounting for nearly half (around 45 per cent) of the total urban population of the nation. These highly urbanized states already have an open window of opportunity, which will close significantly by 2041.

The changes in urban population is contributed by three factors: migration of people from rural areas; natural increase of urban population; and inclusion of new areas under 'urban'. In future, migration will pick up pace as large number of young people and those in the workforce - mainly from the states in northern and eastern part of the country - find livelihood in the deficit-workforce states.

One of the features of urbanisation in India is concentration of population in large urban agglomerations. As per the 2011 census, 161 million people (43 per cent of the total urban population) live in 53 'Million Plus' cities, with 18 cities added since the 2001 census. Nearly one-fifth of the urban population (17.4 per cent) lives in slum areas, as per the 2011 census, thus planning for housing and infrastructure of cities deserves special attention.

#### Gender

A 'gender lens' has largely been lacking in developmental planning. The main cause of gender inequality in India lies in its patriarchal society, resulting in low value and status of women and girls. This low status is further compounded by poverty, lack of education and health care needs. Despite several schemes and programmes to enhance value of the girl child, the practice of early and child marriage still persists, child sex ratio is still skewed towards boys, and girls continue to face discrimination in every walk of life.

In 2017, India ranked 127<sup>th</sup> on the gender inequality index, which is a composite measure of three dimensions: reproductive health, empowerment and the labour market. Son preference and gender-biased sex selection is evident by an overall skewed sex ratio (943 women per 1000 males) and child sex ratio (919) as per

the 2011 census, and adverse sex ratio at birth (898 girls per 1000 boys) as per SRS 2014-16. One quarter of women, aged 20-24, are married before attaining 18 years of age. In fact, prevalence of child marriage is even higher in some states, largely in the northern and eastern parts of the country.

The work participation rate of women is an important indicator of their contributions in the economy and their being mainstreamed in development process. The female labour force participation is 28.5 per cent as compared to 82 per cent for men in 2017<sup>6</sup>. The key challenges in achieving gender equality lies in closing the gaps between men and women in education, particularly higher and vocational skills, health and nutrition, access to land and assets, work-force participation (in both the informal and formal sectors), and ending discriminatory practices such as gender-biased sex selection and child marriage and gender-based violence in both domestic and public spaces.

### Realising the demographic Dividend - A differential approach

The demographic dividend is the *potential* growth in a country's economy, resulting from a change in the age structure of its population. The smaller share of children enables greater investment per child, particularly for health care, nutrition, education and skills. The future entrants to the labour force will have better productivity, which is likely to boost per capita income. This can also lead to increase in savings that can be used for new investment for added returns. However, realisation of benefits is not automatic. Considering the huge population size and profound demographic diversity in India, a differential planning approach is needed to reap the benefits of demographic dividend.

Forward-looking policies and development strategies must include future population dynamics and build on intersecting contours of age, location and gender. Differential policy imperatives are necessary for three groups of states, passing through different stages of potential demographic dividend:

#### Planning for states where the window will close soon

In eight demographically advanced states<sup>7</sup>, the focus of the policies and programmes should be on ageing and creating a conducive work environment for migrants workers from outside. The thrust should be on the following:

- Strengthening social and health security for the ageing population (social protection, mapping and building resources for their health care); enabling older persons to acquire new employment skills; and promoting intergenerational bonding
- Innovating employment solutions for women (working from home, flexible working hours); promoting skills and entrepreneurship, income and

<sup>5</sup> Gujarat, Maharashtra, Andhra Pradesh & Telengana, Karnataka, Kerala and Tamil Nadu.

<sup>6</sup> The Global Gender Gap Report, 2017. World Economic Forum, [http://www3.weforum.org/docs/WEF\\_GGGR\\_2017.pdf](http://www3.weforum.org/docs/WEF_GGGR_2017.pdf)

<sup>7</sup> Kerala, Tamil Nadu, Delhi, Andhra Pradesh, Gujarat, Punjab, West Bengal

assets for women; and social protection for older women

- Evolving migrant-friendly policies (access to sanitation, health, housing and social services, training in local language); retraining in emerging employment opportunities (e.g. elderly care); holistic equitable city planning including age and gender friendly environments

### Planning for states where the window will close in a decade

Another set of eight states<sup>8</sup> will have about a decade after which the dependency ratio will start increasing. The aim should be to empower young people and the policy focus should include:

- Providing education, skill building and creating employment opportunities for young people, especially women
- Strengthening sexual and reproductive health programme with human rights approach, focusing on information, delaying age at marriage and ensuring access to spacing methods for family planning particularly to young couples
- Addressing discrimination with continued focus on improving sex ratio at birth; life skills education for boys and girls; ensuring secondary education; addressing violence - ensuring safety of girls and women in public spaces
- Preparing for an ageing population and small families with intergenerational bonding
- Evolving support systems for migrants (accessibility of health services, housing, transportation and decent working conditions, crisis support instruments, especially for migrant women)

### Planning for states where the window is yet to open

Even though some states<sup>9</sup> are lagging behind in demographic transition, these will have an edge of supplying greater share of working age population in future. A three-fold policy focus is required on ensuring universal access to quality sexual and reproductive health information and services; provisioning of education, life and vocational skills to young people; and addressing harmful practices against women and girls. The focus of planning in these states should be:

- Tapping the demographic advantage - investing in education, especially of girls; and creating opportunities for skill building
- Ensuring universal secondary schooling for girls; life skills education for boys and girls for instilling gender-sensitive beliefs, attitudes and practices
- Building skills, incomes and assets for girls and women
- Expanding voluntary access to family planning services through better availability and outreach to meet the unmet demand
- Addressing maternal and reproductive health needs; improving child survival through neo-natal care, immunisation and nutrition

- Addressing harmful practices - gender-biased sex selection; son preference and child marriage and ensure safety for girls in public spaces; eliminating all forms of sexual coercion and violence against women and girls
- Engaging men and boys for promoting positive norm changes towards achievement of gender equality
- Strengthening support systems for migrating populations (mapping of skills needed in destination states, investments in those skills, investing in a skilled workforce, greater dissemination of work opportunity outside states) and provisioning support systems for family members left behind

### Looking forward

Inter-regional population dynamics in India presents a unique situation, which can be turned into a powerful engine for the overall socio-economic development by adopting a differential planning approach. This calls for time-bound investments to empower, educate and equip young people before they enter the workforce. It is equally imperative to ensure an investment climate and labour policies to expand and sustain safe and secure employment.

The urgent first step would be to review existing policies and programmes of each group of states vis-à-vis status of demographic window of opportunity. While group-specific actions would be required for states, a supra-state body should be established to coordinate between the groups of states, as demographic shifts in one part of the country are usually impacted by changes in other areas.

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<sup>8</sup> Karnataka, Odisha, Himachal Pradesh, Maharashtra, Assam, J&K, Uttarakhand, Haryana

<sup>9</sup> Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Bihar