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Gender, youth and demographic shifts in India[1]

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Abstract: This paper synthesises what is known about gender, youth and demographic shifts in India, and the ways in which these affect India's likelihood of reaping the demographic dividend. It traces age structure shifts in India and its states, and describes the unique pattern that will take place – smaller peaks and a longer window of dividend. Using available data and through an evidence review, it thenconsiders the situation of the young, and assesses India's preparedness to reap the demographic dividend, notably, the educational accomplishments of its youth, their entry into the labour force, and the ways in which the patriarchal family system perpetuates gender disparities and disadvantages girlsand young women. The evidence raises concerns about whether India will reap the full extent of its demographic dividend unless investment in young people's health and wellbeing is prioritised. The paper ends by outlining promising strategies to ensure that the youth population will be empowered and equipped to take advantage of India's advantageous demographic situation.

Introduction

Over the course of the past century, India has witnessed remarkable changes in its demographic scenario - it has passed through a classical demographic transition, and its population is estimated to have reached 1.4 billion by 2022 (United Nations, 2022). The total fertility rate is now 2.0 and has reached replacement level in all but four states – Bihar, Jharkhand, Meghalaya and Uttar Pradesh (International Institute for Population Sciences (IIPS) and ICF, 2021), and its age structure places the country in the advantageous position of a low dependency ratio and the potential of being able to reap the demographic dividend (Kulkarni, 2014). Whether and how the demographic dividend may be reaped depends hugely on the size, skills and productivity of its labour force, which, in turn, are largely shaped by the situation of young people.

This paper aims to synthesise what is known about gender, youth and demographic shifts in India, and the ways in which these affect India's likelihood of reaping the demographic dividend. First, it traces demographic shifts in India, notably the fertility transition, consequent changing age structure and the demographic dividend. Second, it discusses the situation of young people in the country and raises concerns about whether India will reap the full extent of its demographic dividend. It ends by outlining promising strategies to ensure that the youth population will be empowered and equipped to take advantage of India's advantageous demographic situation.

As is well-known, a rise in the share of the working age population lowers the dependency ratio, and this opens up opportunities for the demographic dividend, known as the first dividend. The savings made during this period (as a result of the smaller dependent population) are assumed to become

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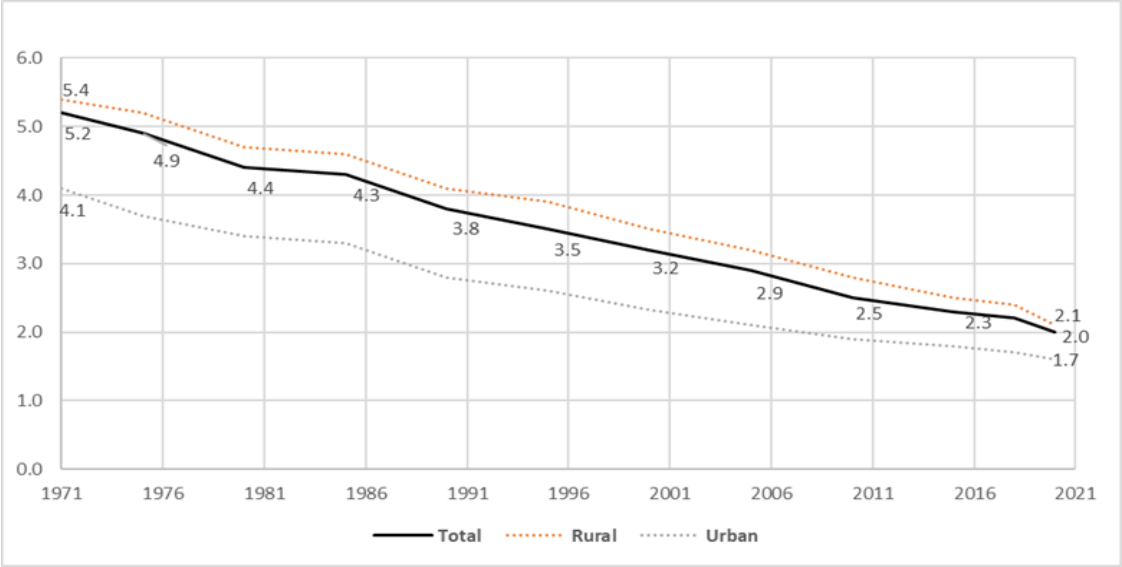
invested in the economy and contribute to economic growth, a phase held to yield the second dividend. The focus here is more on the first dividend, which is purely a demographic phenomenon. The UN Population Division projections (medium variant) suggest that India has already begun to recover the dividend - the dividend is projected to peak in the early 2040s and then decline as the share of the elderly increases, and finally close by the mid-2070s (United Nations, World Population Prospects, 2019).

Demographic shifts

After a long stall, fertility levels in India began to decline in the late 1970s-early 1980s. The decline has been notable, with the total fertility rate (TFR) falling from more than 5 children per woman in 1971, to 2.3 by 2016, and to 2.0 by 2019-20, and reaching below replacement levels by 2020 (Figure 1).

Figure 1: Trends in Total Fertility Rate (TFR) in India by Place of Residence, 1971-2020



Source: Sample Registration System, Registrar General of India, 2015 (from 1971 to 2018) and National Family Health Survey (NFHS-5), 2019-21 for 2020 (IIPS and ICF, 2021)

The pace of this decline has not, however, been consistent across all states of the country, with fertility declines in the southern states initiated far earlier than elsewhere (Figure 2). As a result, by 2019-2021, the TFR ranged from 1.4 to 3.0 in the large states, with all but three large states (Bihar, Jharkhand, Uttar Pradesh; and two small states (Manipur and Meghalaya, not shown in Figure 2) reporting below-replacement fertility levels.

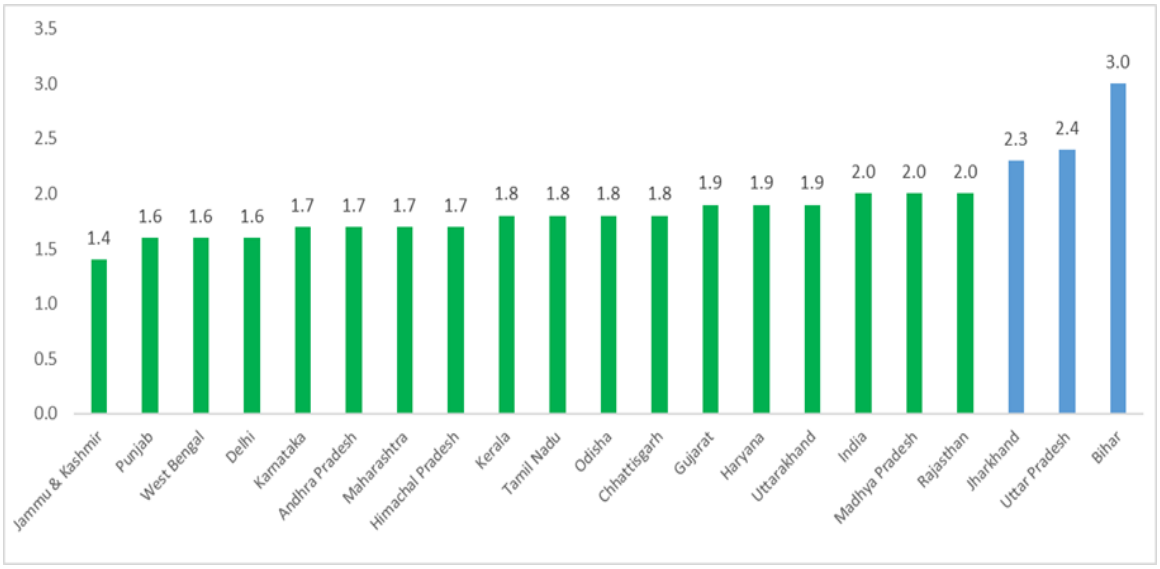
An important consequence of this decline is the change in the age structure, with birth cohorts from high fertility decades contributing to a youth bulge, and the share of the working age population increasing for some years and eventually leading to a rise in the share of elderly population. The projected age distribution of India's population clearly indicates that compared to the current situation, the share of children will be much lower in the next few decades (Figure 3a), while the share of the working age population will be higher. By 2061, however, the share of the elderly population will be

substantial as compared to the current situation. Patterns of age distributions over time will vary across states. For example, Figures 3b and 3c compare the current and future age patterns in two demographically divergent states of India, namely Kerala and Bihar. Due to the achievement of replacement levels of fertility in Kerala a few decades ago, the share of the working age population is high in 2021, whereas in subsequent decades, the share of its elderly population will rise (Figure 3b). On the other hand, because of its continuing higher fertility levels, Bihar will witness an increase in its share of the working age population over several decades to come (Figure 3c).

As a result of this disparity in the pace of fertility decline, India's course of the demographic dividend is unique (see, for example, Kulkarni, 2021). For one, it is projected to have a smaller peak than other countries have experienced or will experience. Second, however, this more moderate dividend will be experienced over a longer window of time, calling for a more gradual absorption into the labour force. And finally, while all states will experience large increases in their working age population up to around the 2030s, thereafter, states leading in the transition will no longer experience gains. Because states will experience the youth bulge and bust sequentially, the demand for labour will vary across states. This uneven demand for and supply of labour will be accommodated by large inter-state and inter-regional migration of labour from high fertility states (Bihar, Jharkhand, Uttar Pradesh etc.) to low fertility states whose demographic window will close early (Kerala, Tamil Nadu for example).

Today, the adolescent and youth population (ages 10-24) constitute 27 percent of India's population. Projections suggest that the share of this population will be in the range of 25 percent of India's population for at least the next decade. There will be between 350 million and 370 million individuals in this age group during this time, with declines projected thereafter and reaching 18 percent of the total population, or 335 million, by 2041.

Figure 2: Total fertility rate, India and larger states, 2019-21



Source: IIPS and ICF, 2021

Figure 3a: Projected broad age distribution, India, 2021-2061

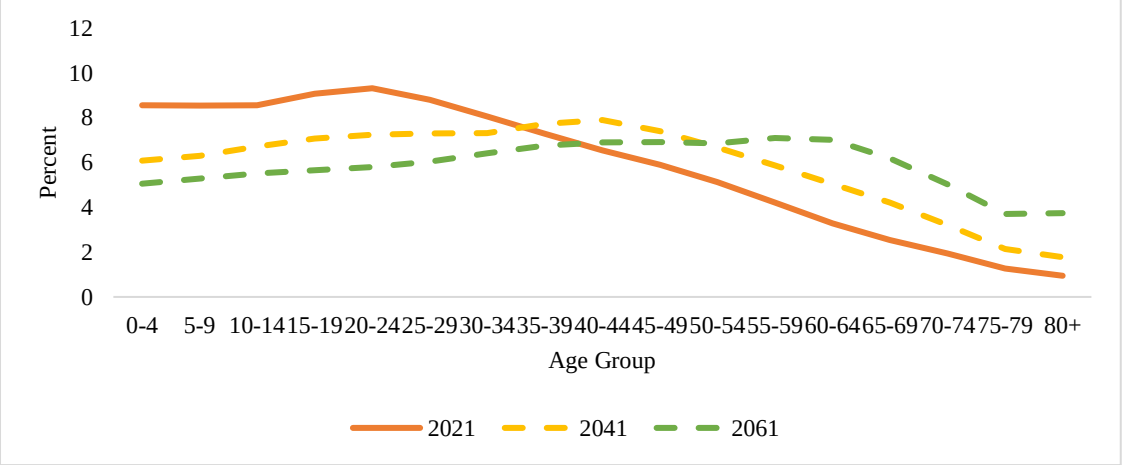


Figure 3b: Projected broad age distribution, Kerala, 2021-2061

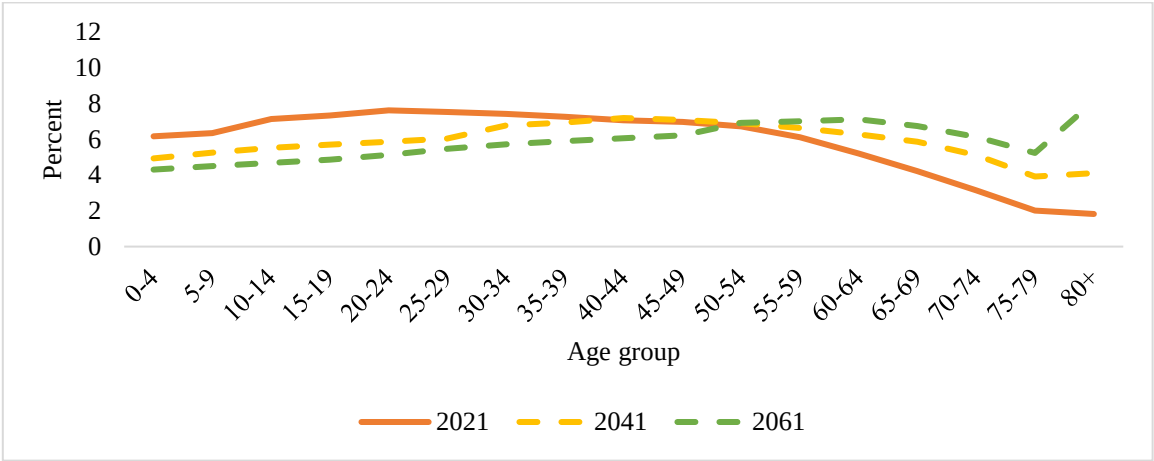
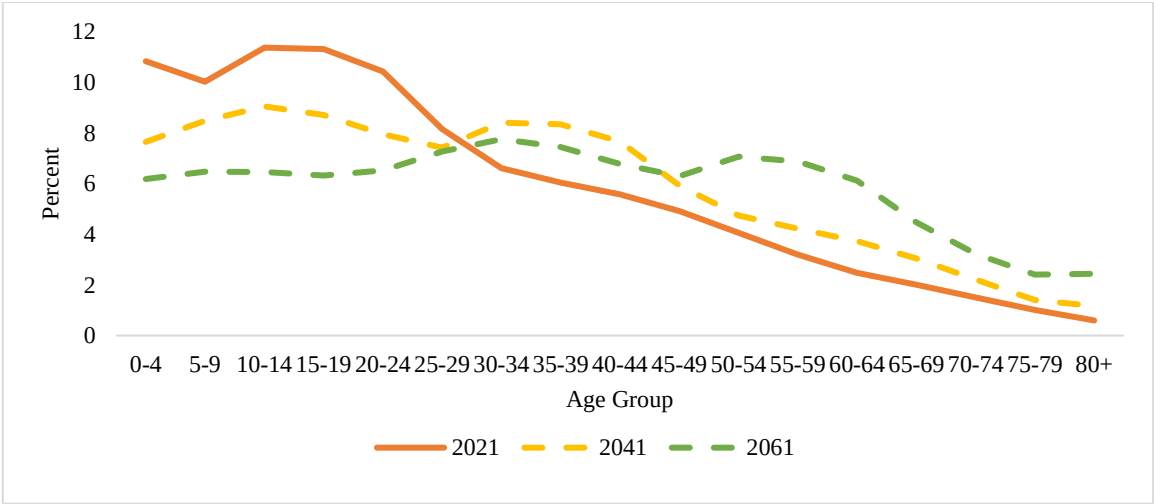


Figure 3c: Projected broad age distribution, Bihar, 2021-2061



Source: Author's calculation

Reaping the demographic dividend: The situation of young people

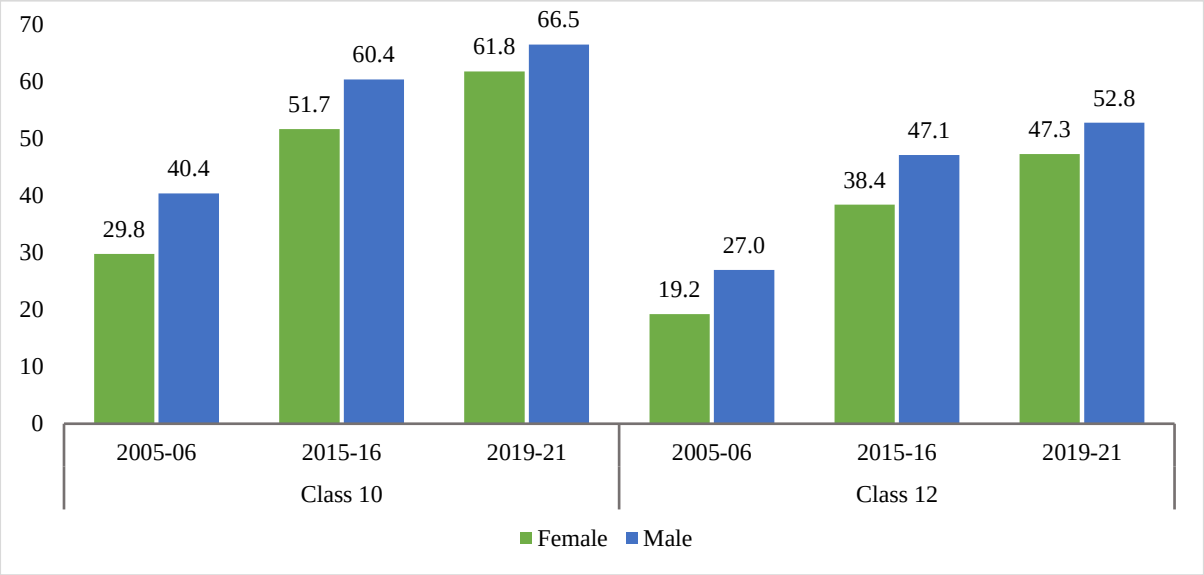
Whether India takes advantage of its demographic dividend depends hugely on the extent of human capital formation among today's adolescent and young population, and the extent to which they make a successful transition to adulthood. As indicated in the report of the Lancet Commission on Adolescents, investments in the young today will reap triple dividends – for young people themselves today, for their lives as adults, and for the lives of the next generation (Patton et al., 2016). To claim the advantage of the demographic dividend, two conditions must be met: the additional labour force resulting from the youth bulge must be productively employed, and the bulge population in the labour force must be appropriately educated, skilled and employable. In short, much depends on whether and how India ensures an educated, skilled and healthy population of young people, with girls and young women participating equally with boys and young men, and with young people empowered to claim their rights. Recognising the unique nature of India's demographic dividend, potential challenges associated with inter-state and regional migration must moreover be anticipated and met, and young people on the move must be empowered and supported to adjust in the new setting. In this section, we discuss the extent to which the young in India are likely to meet these conditions, that is, make a successful transition to adulthood.

Education

Two important pieces of legislation have taken place in this century that have relevance for education in India. The Right of Children to Free and Compulsory Education Act (RTE) of 2009 (Government of India, Ministry of Law and Justice, 2009) ensures universal enrolment, improved infrastructure and better teacher capacity. More recently, India launched its National Education Policy in 2020 (Ministry of Human Resource Development, 2020), whose goals are to rehaul its education system so that by 2040 it is "second to none" and attention is paid to equitable access and quality.

Equitable access remains a concern. Attainment of a minimum of a secondary school education is necessary for the achievement of the demographic dividend, and evidence suggests that proportions achieving this milestone have indeed increased, but many youth continue to be out of school by the time they are aged 15-17 (approximate ages for the completion of Class 10). Gains over time in the attainment of a secondary school education have been impressive but continue to be well below universal. Gender differences have narrowed but remain evident. Age-specific data shows that among youth aged 20-24, 62 percent of young women and 67 percent of young men had completed at least secondary education (Class 10) in the 2019-21 period, and 47 percent of young women and 53 percent of young men had completed higher secondary education by 2019-21. The rates were markedly higher than those recorded in 2015-16 and in 2005-06, as seen in Figure 4 (IIPS and Macro International, 2007; IIPS and ICF, 2017; IIPS and ICF, 2021).

Figure 4: Distribution (%) of respondents (20 to 24 years) by years of schooling completed, NFHS 2005-06[1], 2015-16[2] and 2019-21[3]



Source: [1]IIPS and Macro International, 2005; [2]IIPS and ICF, 2017; [3]IIPS and ICF, 2021

Other socio-demographic inequities have also been observed -- with rural youth (especially females), those from socially excluded groups, and those from eastern and central states far less likely to have attained a secondary school education than others (IIPS and ICF, 2021; IIPS and ICF, 2017; Varughese and Bairagya, 2020).

Number of years of education does not guarantee good learning outcomes or future employability, and equitable quality, like access, remains a concern. Findings regarding learning outcomes are disturbing (Table 1). For example, the Annual Status of Education Report (ASER) surveys have shown that learning outcomes among those in Classes 5 and 8 (about ages 10 and 13, respectively) are far below the minimum required for that class, and changes over time were modest. By 2018, just 50 percent and 73 percent of students in Classes 5 and 8, respectively, could read a Class 2 text fluently, and just 28 percent and 44 percent, respectively, could solve a division problem. Improvements over time, moreover, were hardly visible. It is well-accepted that if opportunities to gain basic skills are lost in early years, the catch-up effect as adolescents age is difficult to attain (Pritchett and Beatty, 2012).

Table 1: Reading and arithmetic skills of students in Classes 5 and 8, rural: India, 2012-2018

	Reading: can read a Class 2 text fluently		**Arithmetic: Can solve a long division problem**	
	Class 5 (~age 10)	Class 8 (~age 13)	Class 5 (~age 10)	Class 8 (~age 13)
India				
2012	46.9	76.5	24.9	48.1
2014	48.0	74.7	26.1	44.2
2016	47.9	73.1	26.0	43.3
2018	50.3	73.0	27.9	44.1

Source: ASER, 2019

ASER surveys are limited in that they refer to the rural and school-going population, and age-specific data for boys and girls are not publicly available. The gaps are filled by state-wide surveys of adolescents in three poorer states (Bihar, Jharkhand, Uttar Pradesh) in 2015-2018 that have used ASER questions to probe reading and maths skills among 10-19 or 10-21 year old unmarried girls and boys, and married girls aged 15-19 or 15-21 among those who had ever been to school (Table 2)/Figure 5). Overall, learning outcomes suggest a similar picture to those portrayed by the ASER reports, with basic skills eluding many. What is notable, however, is that disparities are narrow at each age with regard to reading skills, but wide, at each age, with regard to arithmetic skills. Most deprived are married girls whether in terms of literacy or numeracy. Also notable is the similarity across states in reading skills, and the considerable variation, with more adolescents from Bihar and fewest from Uttar Pradesh displaying arithmetic skills (Santhya et al., 2017a; Santhya et al., 2017b; Jejeebhoy et al., 2019).

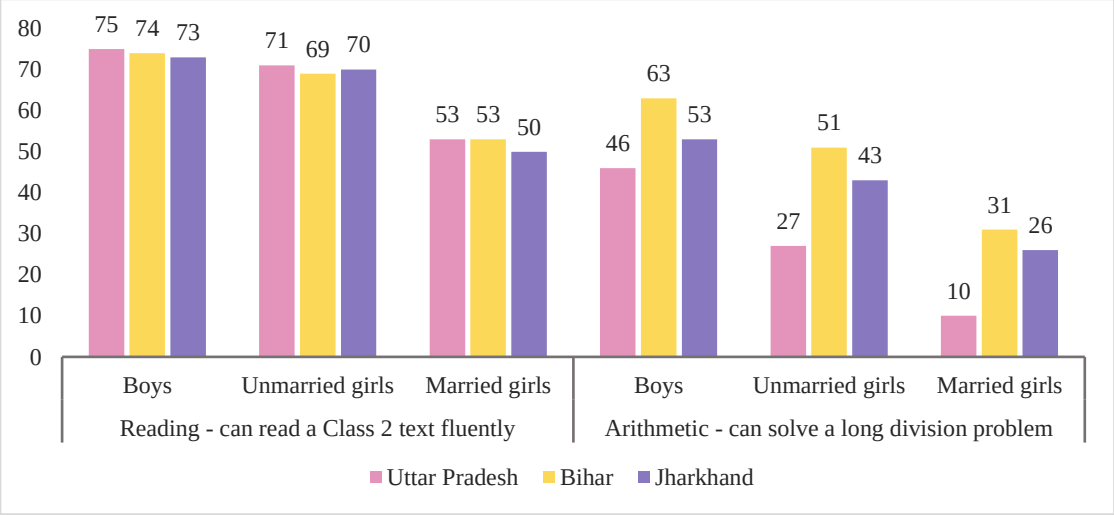
Compared to urban adolescents, rural adolescents are more disadvantaged -- a result of poorer infrastructure and teaching capacity in rural areas. Findings from these surveys also confirm that in both age groups, urban adolescents demonstrate better reading and arithmetic skills than do their rural counterparts, and girls in each area are more disadvantaged, especially with regard to numeracy skills, than their male counterparts (not shown in tables, Zavier, personal communication, Raushan, personal communication).

Table 2: Reading and arithmetic skills of adolescents and young adults who had ever attended school: Uttar Pradesh and Bihar 2015-2016[1,2]; Jharkhand 2018[3]

	Reading: can read a Class 2 textfluently			**Arithmetic: Can solve a long divisionproblem**		
	10-14	15-19 unmarried	15-19 married	10-14	15-19 unmarried	15-19 married
Uttar Pradesh[1]						
Boys	55.8	74.9	--	39.2	46.1	--
Girls	55.4	70.8	53.3	23.4	26.5	9.9
Bihar[2]						
Boys	56.0	73.6	--	53.5	63.4	--
Girls	51.4	68.9	52.9	38.4	51.0	30.6
Jharkhand[3]						
Boys	49.5	72.9	--	42.8	53.4	--
Girls	47.4	69.7	50.1	31.1	42.8	25.8

Source: [1]Santhya et al., 2017a; [2]Santhya et al., 2017b; [3]Jejeebhoy et al., 2019

Figure 5: Reading and arithmetic skills of adolescents and young adults who had ever attended school: Uttar Pradesh and Bihar 2015-2016 (15-19)[1, 2]; Jharkhand 2018 (15-21)[3]



Source: [1]Santhya et al., 2017a; [2]Santhya et al., 2017b; [3]Jejeebhoy et al., 2019

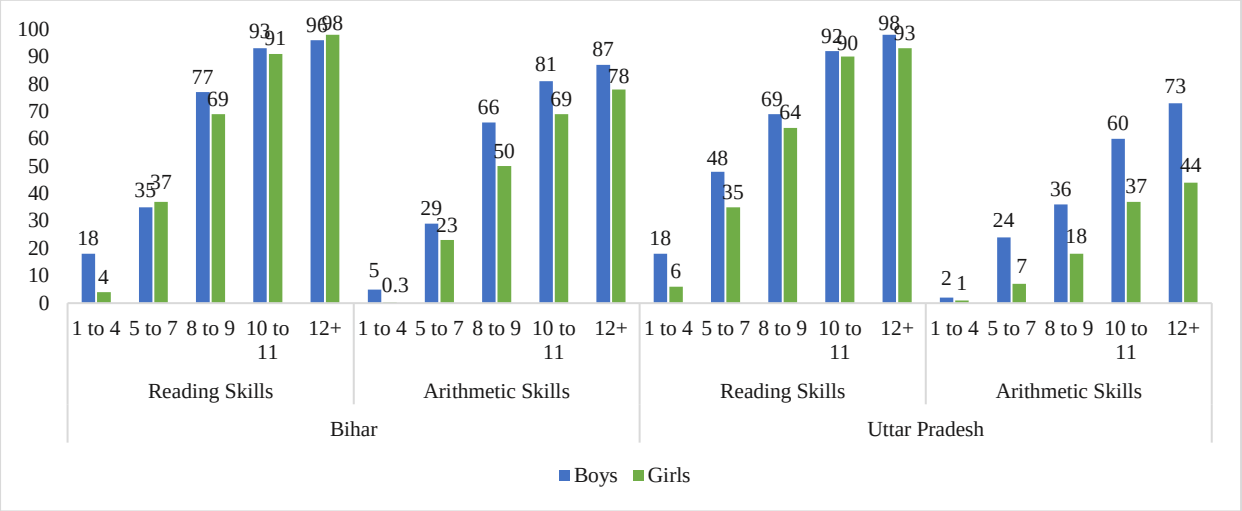
Basic reading and arithmetic skills are not universal even among those who have completed secondary education, as observed among adolescents aged 15-19 in Bihar and Uttar Pradesh. Table 3/Figure 6 shows that even at each individual level of education attained, gender disparities are evident in both states. For example, among those who had completed 8-9 years of education, just 68-77 percent of boys, and 64-69 percent of girls could read a Class 2 text fluently, and even fewer – 36-66 percent of boys and 18-50 percent of girls could solve basic arithmetic problems. Even among those who had completed 12 years of schooling, literacy and numeracy were not achieved by all. Gender disparities in reading skills were narrow, but in numeracy skills were wide, confirming what has been observed globally about wide gender gaps in arithmetic skills in gender inegalitarian settings, narrowing in settings with more gender equitable attitudes and practices (Guiso et al., 2008; Das and Singhal, 2021).

Table 3: Percentage of 15-19 year old adolescents who were ever enrolled in school who could read a Class 2 text in Hindi fluently and solve a division problem correctly by completed years of schooling, Uttar Pradesh[1] and Bihar[2], 2015-2016

	Reading skills – could read a Class 2 text in Hindi				**Arithmetic skills – could solve adivision problem**			
	Uttar Pradesh[1]		*Bihar*[2]		*Uttar Pradesh*[1]		*Bihar*[2]	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1 to 4	17.5	6.2	17.5	3.6	1.8	1.1	5.4	0.3
5 to 7	47.1	35.3	35.1	36.5	24.4	6.7	29.3	23.0
8 to 9	68.6	64.2	77.2	68.8	36.3	17.6	65.8	50.1
10 to 11	91.9	89.8	93.3	90.6	60.2	36.8	80.8	68.7
12+	98.1	92.8	96.0	97.7	72.6	44.2	87.2	78.3

Source: [1]Santhya et al., 2017a; [2]Santhya et al., 2017b

Figure 6: Percentage of 15-19 year-old adolescents who were ever enrolled in school who could read a Class 2 text in Hindi fluently and solve a division problem correctly by completed years of schooling, Uttar Pradesh[1] and Bihar[2], 2015-2016



Source: [1]Santhya et al., 2017a; [2]Santhya et al., 2017b

COVID-19 and lengthy school closures necessitated by lockdowns are likely to have led to premature school discontinuation or stagnation, and/or learning losses globally. While data are sparse in India, the most recent Unified District Information System for Education Plus (UDISE+) report shows that, in 2020-21, the dropout rate at the Class 9-10 level was at 14.6 per cent (14.2% for girls and 14.9% for boys) – a meagre improvement from 16 per cent in the pre-pandemic period 2019-20 (Government of India, Ministry of Education, 2022). With regard to learning losses, more evidence is available. The National Achievement Survey 2021, administered by the CBSE across 1.18 lakh schools using similar curricula across the country, provides evidence of worsening learning outcomes across grades Class 3, Class 5, Class 8 and Class 10 over the period characterised by COVID-19. Average test performance dropped by 5-25 points across subjects and across classes (Government of India, Ministry of Education, 2022).

ASER surveys from Chhattisgarh (ASER, 2022) and Karnataka (ASER, 2021) offer more evidence of the learning losses associated with pandemic-fostered school closures among those currently enrolled in various classes. Particularly among those at the start of adolescence (age 10), there were huge drops in already compromised reading and maths skills between 2018 and post-pandemic years (2021 for Chhattisgarh and 2020 for Karnataka). In contrast, for those in Class 8, learning outcomes remained poor but unchanged compared to pre-pandemic years. (Table 4)

International comparisons of learning outcomes suggest alarm about the quality of Indian education. The OECD's Programme for International Student Assessment (PISA) conducts a global survey of 15-year-old school going adolescents, using a standardised test across countries. The only year India participated in the survey was 2009, represented by students of two high performing states, namely, Himachal Pradesh and Tamil Nadu. Rankings from surveys of students across some 74 countries

(including these two states of India) suggest that Indian students fell at the bottom for both reading and maths literacy, ranking 72nd-73rd of 74 countries (Rao, 2013; Walker, 2011).

Table 4: Reading and arithmetic skills of students in Classes 5 and 8, rural, from pre-lockdown to post-lockdown: Chhattisgarh 2014-2021[1], Karnataka 2014-2020[2]

	Reading: can read a Class 2 text fluently		**Arithmetic: Can solve a long division problem**	
	Class 5 (~age 10)	Class 8 (~age 13)	Class 5 (~age 10)	Class 8 (~age 13)
Chhattisgarh				
2014	52.4	75.9	18.0	29.6
2016	56.0	73.5	23.1	28.1
2018	59.6	78.7	26.9	31.0
2021	44.6	75.1	13.0	32.3
Karnataka				
2014	47.2	70.6	53.7	37.0
2018	46.0	70.3	54.6	39.0
2020	33.6	66.4	44.1	38.0

Source: [1]ASER, 2022 (Chhattisgarh); [2]ASER, 2021 (Karnataka)

Tertiary, and technical and vocational education and training (TVET)

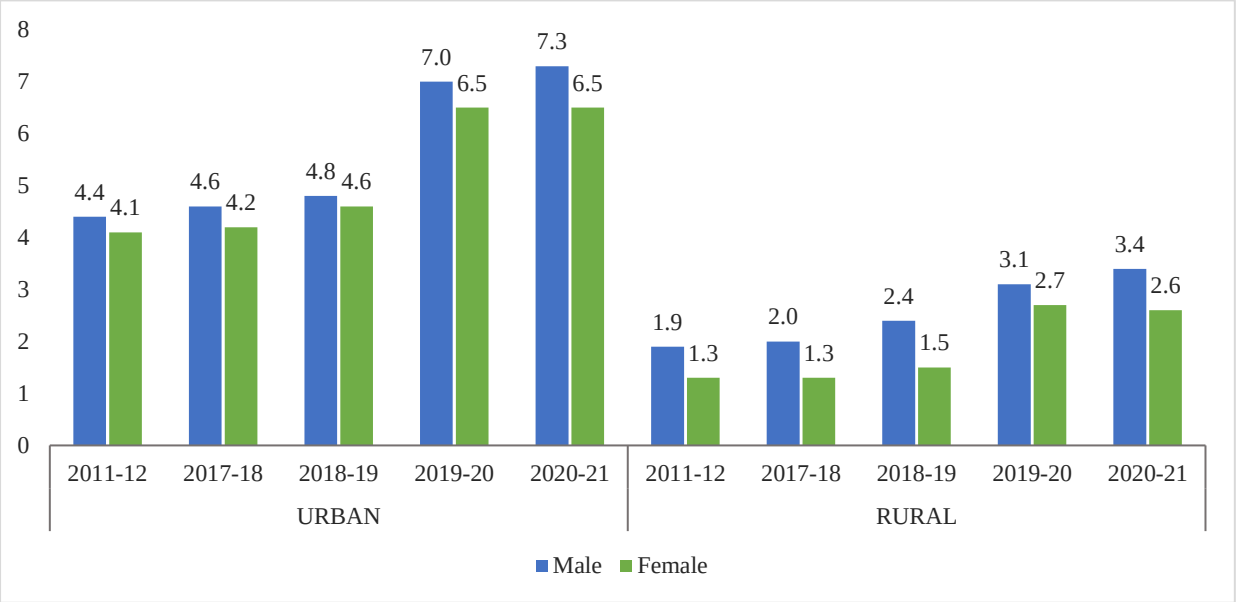
The Sustainable Development Goals (SDG) call for, by 2030, equal access for all women and men to affordable quality technical, vocational and tertiary education, including university (Target 4.3), an increase in the number of youth and adults who have relevant skills, including technical and vocational skills for employment, decent jobs and entrepreneurship (Target 4.4) and a substantial reduction in the proportion of youth not in employment, education or training (Target 8.6) (United Nations, 2020).

Few youth in India enter into higher education. The All India Survey of Higher Education (AISHE) observes that by 2019-20, gross enrolment ratios for higher education among those aged 18-23 was 27. Disparities are wide across states, with, for example, with gross enrolment ratios ranging from 15 in Bihar to 51 in Tamil Nadu. Nearly 80 percent of the students were enrolled in undergraduate programmes. Only 10.8 percent were enrolled for post-graduate courses (mostly diplomas and certificates, 8%) but gender parity has been achieved, with an overall gender parity index of 1.01 (F/M). (Government of India, Ministry of Human Resource Development, Department of Higher Education, 2020). However, enrolment in Science, Technology, Engineering and Mathematics (STEM) programmes remains skewed. A recent analysis of STEM enrolment over the period 2010 to 2019 notes that gender parity in basic science disciplines had increased over time (from 0.87 to 1.04 at the undergraduate level, and from 1.08 to 1.73 at the postgraduate level), but remains skewed for engineering and technology (steady at 0.41 at undergraduate levels and increasing from 0.47 to 0.59 at graduate levels) (Amirtham and Kumar, 2021).

With regard to technical and vocational education and training (TVET), the Skill India Mission promotes the skilling of youth. Despite this attention, few young adults aged 18-29 have undergone TVET (Figure 7). Over successive surveys conducted in the decade from 2011-12 to 2020-21, fewer than ten

percent of young adults had acquired such training. Gender and rural-urban differences were mild but in favour of young men and urban young adults, respectively (MOSPI, 2022).

Figure 7: Percentage of persons of age 15-29 years who received formal vocational/technical training during NSS 68th Round (2011-2012)[1], PLFS (2017-18)[1], PLFS (2018-19)[2], PLFS (2019-20)[3] and PLFS (2020-21)[4]



Source: [1]MOSPI, 2019 (PLFS 2017-18); [2]MOSPI, 2020 (PLFS 2018-19); [3]MOSPI, 2021 (PLFS 2019-20); [4]MOSPI, 2022 (PLFS 2020-21)

Digital literacy

Digital literacy is an essential 21st century skill, whose urgency is recognised in India's flagship programme, Digital India. Various policies and programmes, including the National Education Policy (2020) have stressed the promotion of digital learning and enhancing of related infrastructure requirements. While data are sparse, available evidence suggests that the proportion of households and youth who are e-literate remains limited, and this too has implications for whether, and the pace at which, the demographic dividend may be attained. With regard to mobile phone ownership, just 54 percent of women aged 15-49 own a phone that they themselves use, and percentages vary from 69 percent among urban women to 47 percent among rural women, from 79 percent of those from the richest households to 33 percent of those from the poorest households, and from over 80 percent in some states (Mizoram, Nagaland, Sikkim, Goa and Kerala) to fewer than half in others (Andhra Pradesh, Chhattisgarh, Gujarat. Jharkhand, Madhya Pradesh, Uttar Pradesh). Computer ownership at household level is poor as well, as observed in both the 75th round of the NSS (2017-2018) (4% of rural and 23% of urban households) and NFHS-5 (2019-21) (4% and 19%, respectively) (MOSPI, 2019; IIPS and ICF, 2021). Furthermore, NFHS-5 shows that just 32 percent of girls aged 15-19 owned a mobile phone, compared to 61-65 percent of young women aged 20-29. The effect of the limited ownership of devices was acutely felt during the COVID-19 lockdown -- the National Achievement Survey 2021 found that 24 percent of the students surveyed had no digital device at home, with almost 40 percent were unable to access school material,

further highlighting the damaging consequences of India's digital divide (Government of India, Ministry of Education, 2022).

Ability to read text messages and access the internet are also compromised. The ability to read text messages is not universal among the young, reported, for example, by just 89 percent of those aged 15-19 who own a phone that they themselves use (IIPS and ICF, 2021). Overall, only a third of women and over half of men (33% and 57%, respectively) had ever accessed the internet, and wide rural-urban differences prevailed -- worst off are rural women, among whom just 25 percent had accessed internet. While internet access is higher among the young, it remains limited -- 41-42 percent of girls and boys aged 15-19, and 49 percent of young women and 65 percent of young men aged 20-24. (IIPS and ICF, 2021).

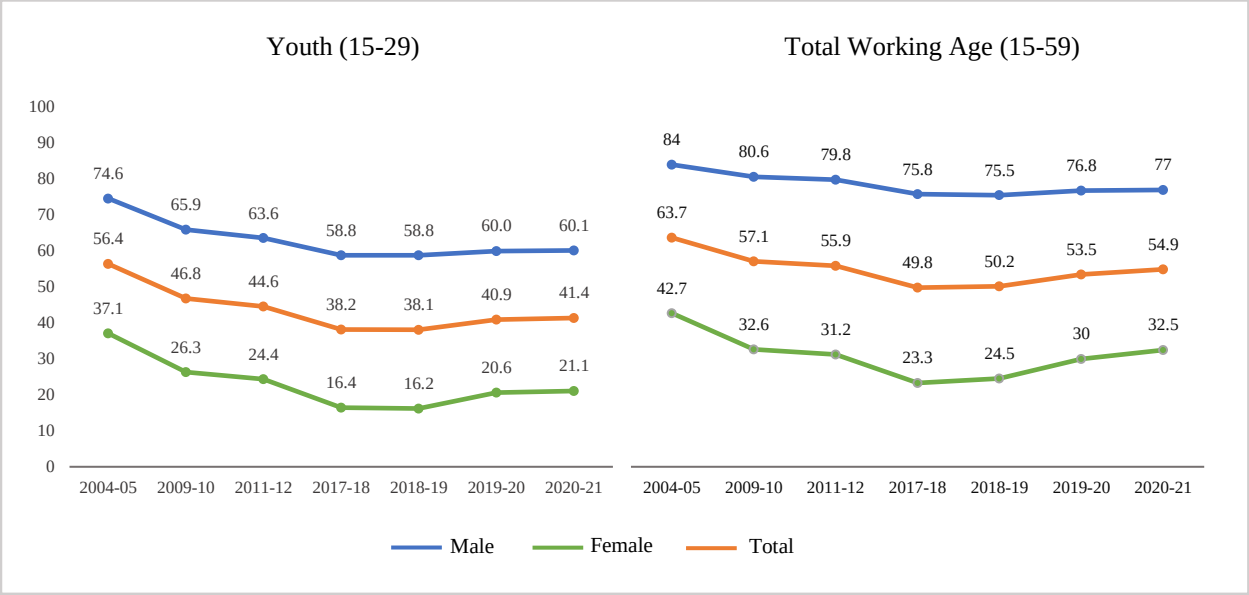
More detailed information about the young comes from adolescent-focused surveys in three states (Bihar, Jharkhand and Uttar Pradesh). Findings suggest wide gender disparities in ownership of a mobile phone, access to the internet and access to social media. Larger proportions of boys than girls aged 15 and older owned a mobile phone, accessed the internet and used social media. Married girls (aged 15-19 or 21) were more likely to own a phone than unmarried girls (35% versus 18%), but were less likely to access the internet (19% versus 33%) and use social media (18% versus 28%). While fewer 10-14 year-olds owned a phone, even among them, boys were more likely than girls to access the internet and social media (Santhya et al., 2017a; 2017b; Jejeebhoy et al., 2019). It is only the minority who reach tertiary education who may have easy access to devices and the internet, and use these facilities for both education and employment purposes (Parvathamma and Danappa, 2013). The thrust on digital learning advocated in the National Education Policy and necessitated by frequent lockdowns not only threatened learning losses among youth in general, but may have severely widened existing gender, socio-demographic and geographic inequities. With basic foundations – reading, maths and digital skills -- affected and exacerbated by COVID-19 interruptions, India stands to lose its demographic advantage without major investment in these sectors, and a major commitment to reaching the most affected.

Labour force participation

Despite increasing levels of educational attainment and urbanisation, and despite signs of narrowing gaps in educational attainment, gender gaps in labour force participation persist. Between 2004-05 and 2020-21, labour force participation rates actually declined sharply up to 2018-19 for both the total population (15+) and youth aged 15-29, and has increased marginally in 2019-20 and 2020-21 (Figure 8 and Table 5). Wide age and gender differences are apparent in each year, with labour force participation rates far higher for the total population (aged 15+) than youth, and females far less likely than males to report labour force participation. There has been a virtual stagnation between 2017-18 and 2020-21 in labour force participation rates of young men (59-60%) and young women (16-21%, a slight increase in the most recent years but still less than rates recorded in 2011-12) – likely attributable to the

limited job market opportunities available to them (MOSPI, 2019; 2021; Mehrotra and Parida, 2019). India fares far worse than other countries, including other patriarchal societies, with regard to women's labour force participation. By 2019-20, while the female labour participation rate was just 21 percent in India and 22 percent in Pakistan, other neighbouring countries recorded considerably higher rates – 82 percent in Nepal, 36 percent in Bangladesh, and 34 percent in Sri Lanka (ILO, nd(a)).

Figure 8: Labour force participation rates among total population aged 15+ and youth aged 15-29, by sex, 2004-05[1], 2009-10[1], 2011-12[1], 2017-18[1], 2018-19[2], 2019-20[2] to 2020-21[3]



Source: [1]MOSPI, 2019 (PLFS 2017-18); [2]MOSPI, 2021 (PLFS 2019-20) [3]MOSPI, 2022 (PLFS 2020-21)

Rural-urban differences are mild among males, but substantial among females, with labour force participation rates far lower for those in urban than rural areas (Table 5).

Table 5: Labour Force Participation Rates among the total population aged 15+ and youth aged 15-29 over time, 2004-05 to 2020-21

	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
YOUTH (15-29)									
2004-05[a]	**56.4**	**74.6**	**37.1**	60.2	77.2	42.8	46.6	68.3	21.7
2009-10[a]	**46.8**	**65.9**	**26.3**	49.6	68.0	30.3	40.1	61.0	16.8
2011-2012[a]	**44.6**	**63.6**	**24.4**	46.4	64.9	27.1	40.5	60.7	18.1
2017-2018[b]	**38.3**	**58.8**	**16.4**	38.1	58.9	15.9	38.5	58.5	17.5
2018-2019[b]	**38.1**	**58.8**	**16.2**	37.8	58.8	15.8	38.7	58.6	17.1
2019-2020[b]	**40.9**	**60.0**	**20.6**	41.3	60.8	20.7	40.0	58.3	20.3
2020-2021[c]	**41.4**	**60.1**	**21.1**	42.0	60.6	22.0	39.9	59.0	19.0
TOTAL WORKING AGE (15+)									
2004-05[a]	**63.7**	**84.0**	**42.7**	67.7	85.9	49.4	53.0	79.2	24.4
2009-10[a]	**57.1**	**80.6**	**32.6**	60.4	82.5	37.8	48.8	76.2	19.4
2011-2012[a]	**55.9**	**79.8**	**31.2**	58.7	81.3	35.8	49.3	76.4	20.5
2017-2018[b]	**49.8**	**75.8**	**23.3**	50.7	76.4	24.6	47.6	74.5	20.4
2018-2019[b]	**50.2**	**75.5**	**24.5**	51.5	76.4	26.4	47.5	73.7	20.4
2019-2020[b]	**53.5**	**76.8**	**30.0**	55.5	77.9	33.0	49.3	74.6	23.3
2020-2021[c]	**54.9**	**77.0**	**32.5**	57.4	78.1	36.5	49.1	74.6	23.2

Source: [a]MOSPI, 2019 (PLFS 2017-18); [b]MOSPI, 2021 (PLFS 2019-20); [c]MOSPI, 2022 (PLFS 2020-21)

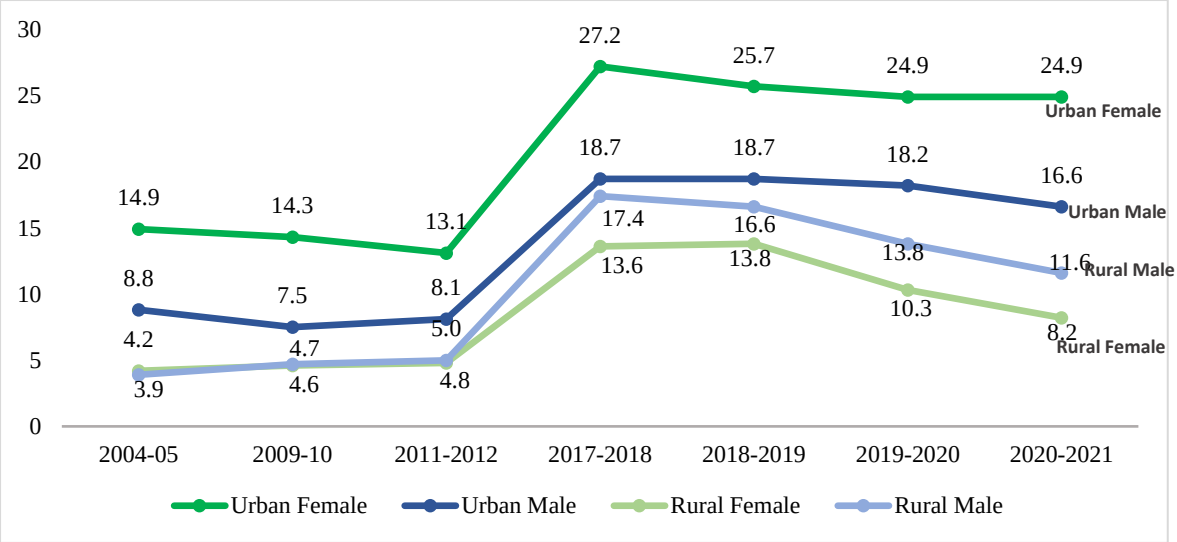
The marked shift towards gender parity in education but not in labour force participation has been observed in other settings as well, including high income countries. Reasons vary. In many settings, including high income countries, this may be attributed to the difficulty women face in combining full-time employment with domestic responsibilities (see, for example, Slaughter, 2012). In India, there are several other inhibiting factors as well. On the supply side, one important reason is the limited culturally-acceptable, woman-friendly job market and wage employment opportunities in India compared to elsewhere, such as, for example, the opportunities provided by the garment industry in Bangladesh, and in some instances in India, call centre opportunities (Fletcher at al., 2017). At the same time, the diminishing of farming jobs has further exacerbated this predicament (Chatterjee at al., 2015). In addition, occupational gender segregation persists (Paul and Raju, 2014), and wages for females are often well below those for male workers at the same level of education in each industry (Naidu, 2016). On the demand side, patriarchal norms inhibit women and girls from accessing occupations that may involve contact with men (see, for example, Jejeebhoy and Kumar, 2021). Childrearing and domestic responsibilities inhibit many women from engaging in full-time or non-agricultural employment. Many in India prefer the flexibility offered at home or on the farm, or casual jobs than a regular, full time job. For example, the NSS has observed that 72 percent of women who were willing to accept work if made available favoured "regular, part-time" jobs over "regular, full-time" jobs" (Chatterjee at al., 2015; Government of India, Ministry of Statistics and Programme Implementation, 2014).

Given the gradual nature of changes in the age structure in India, phases of the dividend vary regionally. Inter-state and inter-regional migration of labour, mostly young and male, are increasingly observed moving from states with young populations and a surplus of labour supply to more prosperous states, whose economic activities increasingly rely on migrant labour. The situation of young migrants is not well documented, but it is evident that many young men move without family, and many migrants face language and cultural barriers. Moreover, many are excluded from services available to native populations - many experience difficulty in accessing health and education services, decent housing and even food security at the place of destination (Borhade, 2011). Risky sexual practices and consequent HIV risk among migrants have been widely studied (see, for example, Saggurti et al., 2011). Most recently, with the pandemic and the abrupt declaration of the 2020 lockdown, the mass return migration of interstate workers showed the extent to which industries relied on semi-skilled migrants and the extent to which their social security is undermined in destination settings (Suresh at al., 2020; Azeez at al., 2021; Sapra and Nayak, 2021).

Trend data show that unemployment rates among youth (ages 15-29) were steady in the period 2004-05 to 2011-12, then experienced a marked increase (Mehrotra and Parida, 2019) followed by a plateauing of rates at high levels thereafter. Unemployment was far higher among the young than the population at large – for example, in 2020-21, it was four percent among the total population, aged 15-59, but 13 percent among youth aged 15-29 (MOSPI, 2022). Youth unemployment was particularly

marked in urban areas – while 12 percent of rural young men and 8 percent of rural young women were unemployed in 2020-21, percentages were as high as 17 and 25, respectively, in urban areas (see Figure 9).

Figure 9: Unemployment rates (in percent) according to usual status (ps+ss) for youth (15-29), 2004-05[1], 2009-10[1], 2011-12[1], 2017-18[1], 2018-19[2], 2019-20[3] to 2020-21[4], by sex and rural-urban residence



Source: [1]MOSPI, 2019 (PLFS 2017-18); [2]MOSPI, 2020 (PLFS 2018-19); [3]MOSPI, 2021 (PLFS 2019-20); [4]MOSPI, 2022 (PLFS 2020-21)

Also of concern is that the expected inverse effect of increasing education levels on employment is not apparent. On the contrary, for all ages 15 and above, unemployment rates increased markedly with levels of education, rising from 0.4 percent among those with no education or a primary school education to 2.5 percent among those with a middle school education and 9.1 percent among those with a secondary school or higher education (MOSPI, 2022). Underemployment also prevails: there is evidence of overqualified youth aspiring for middle and lower rung jobs as well, particularly in the public sector which is seen to provide greater job security than the private sector (CMIE).

Loss of employment and decline in income have been observed globally as a result of lockdowns associated with COVID-19. In India, gender and age disparities characterise the differential impact of the shock on labour market outcomes. Using panel data, one study found that, among those in the workforce prior to the pandemic, women were seven times more likely to lose work during the nationwide lockdown, and young men aged 15–24 were more than four times more likely and young women 3.7 times more likely to lose jobs than adult men and women aged 35-44, respectively. Moreover, among those who lost employment, women were eleven times more likely to not return to work subsequently, compared to men. For those workers who did return to work, moreover, large proportions of men managed to secure work across sectors (moving to self-employment or daily wage work), while women did not have that option and moved out of the workforce (Abraham et al., 2021). Indeed, overall, fewer women actively sought jobs in 2021 compared to 2019 (Bhardwaj, 2022). These findings are all the more disturbing given that

pre-pandemic unemployment among youth, and young women in particular, was already high. While post-pandemic opportunities have been sparse for both women and men, discrimination against women in the workplace, issues of safety and transportation to workplace are further deterrents for women, although caste-specific data suggest that while there has been a reduction in the number of women from general castes in the workforce, the proportion of those from disadvantaged castes has increased, driven by post-pandemic economic insecurity, distress and necessity (Azim Premji University, 2021).

Activity status: Not in education employment or training (NEET)

SDG Target 8.6 calls for a substantial reduction in the proportion of youth not in employment, education or training (NEET)[4] (United Nations, 2020). The percentage of youth (ages 18-24) who are NEET is a powerful measure of the vulnerability of youth, and the extent to which the transition to adulthood has been compromised. It also reflects a country's ability to reap the demographic dividend. India has among the highest levels of NEET in the world. A comparative analysis of NEET in 11 countries reflecting general global trends[5] concludes that India not only has the highest NEET rate (along with Rwanda), but also the biggest gap between young men and young women (along with Saudi Arabia and Ethiopia) (ILO/Sida Partnership on Employment, nd).

The NEET rate in India for the cohort aged 15-24 was 32 percent in 2000, and 30 per cent in 2019 (Figure 10). Trends suggest that for the combined youth population, there has been a decline over time followed by a slight increase in the most recent years. However, levels are high and gender disparities are wide. It is young women's higher NEET rates that dominate the overall NEET rate for the youth cohort, their NEET rates are several times higher than those of young men. For young men, the NEET rate was 8-10 percent for the period 2000-2011, then increased to 14 percent during 2015 and 2019. For young women in contrast, NEET rates record a consistent, albeit mild decline, but even so, as of 2020, as many as 47 percent fell into this category (ILOSTAT explorer, ILO, nd(b)).

Patriarchal social norms and gender gaps

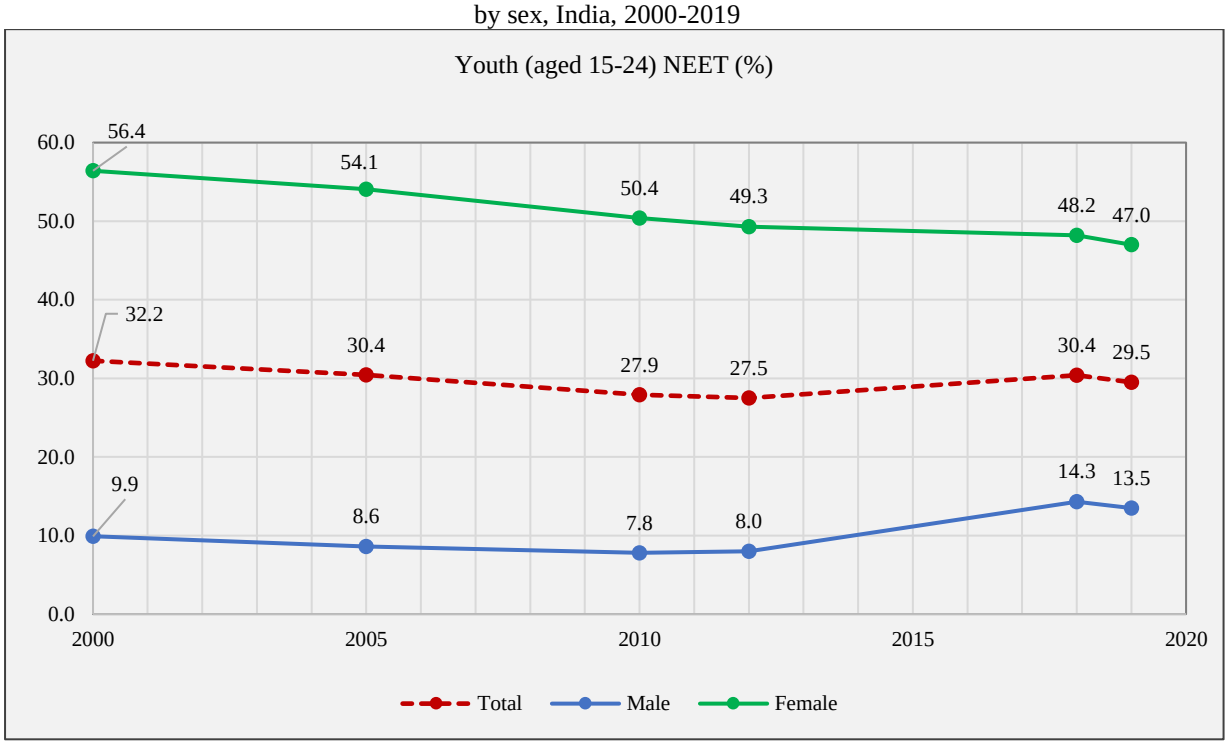
The wide gender disparities in rates of NEET, in compromised learning outcomes, and in lower rates of labour force participation and workforce opportunities experienced by young women and girls compared to young men and boys stand testimony to the fact that India is one of the most gender unequal countries in the world. Indeed, the Global Gender Gap Report (World Economic Forum, 2021) ranks

[4] NEET rates are calculated as shares of the entire age cohort who are not in employment (labour force), and also not in education and training The youth NEET rate is calculated as follows: NEET rate (%) = (Youth – Youth in employment – Youth not in employment but in education or training) / Youth *100. Note that youth both in employment and education or training simultaneously are not double counted when subtracted from the total number of youth. The formula can also be expressed as: NEET rate (%) = ((Unemployed youth + Youth outside the labour force) – (Unemployed youth in education or training + Youth outside the labour force in education or training)) / Youth *100)

[5] Azerbaijan, Chile, Costa Rica, Egypt, Ethiopia, India, Peru, Portugal, Rwanda, Saudi Arabia

India 140th among 156 countries and lists it as the third worst performer in South Asia.[6] Girls and young women are especially disadvantaged. The persistence of patriarchal social norms inhibits their exercise of choice, and the lack of acceptable opportunities and entitlements that recognise the constraints that girls and young women face translates into denial of opportunities to seek higher education, vocational training or a career.

Figure 10: Trends in proportion of youth (aged 15-24 years) not in employment, education and training (NEET) by sex, India, 2000-2019



Source: ILOSTAT

Patriarchal social norms inhibit girls and young women from achieving their potential and claiming their rights in many ways. That girls are poorly valued is evident from the far greater investment by parents in the education of sons than daughters (private school, after-school coaching, etc.) (ASER, 2022), and priorities that emphasise household responsibilities over education for girls. Girls and women in India bear the brunt of domestic drudgery – for example, 74 percent of women ages 15 and above across rural India whose homes lack a source of water undertake time-consuming efforts to collect drinking water for the household, as compared with just 21 percent of men (IIPS and ICF, 2021). Gender inequitable household roles further compound low labour force participation rates among women. Hence, leading factors for NEET expressed by young women were their need to fulfil family responsibilities, followed by, to a lesser extent, lack of suitable work opportunities. In contrast, for

[6] The Global Gender Gap Report benchmarks across countries the evolution of gender-based gaps among four key dimensions including economic participation and opportunity and educational attainment, health and survival, and political empowerment

young men, the leading factor was unemployment and limited availability of suitable work (ILO/Sida Partnership on Employment, nd).

Family honour is closely linked with the behaviour of girls and, notably, their 'sexual purity'--as a result girls are restricted from engaging as fully in activities in which boys and men may participate, including education, work, and even use of public transport. Girls are socialised with narrow aspirations for their futures aside from marriage, aspiring at most for careers that will be acceptable in the marital home, and can be combined with domestic responsibilities (teacher, frontline health worker, seamstress, beautician). They express fears about lack of physical safety and loss of reputation if higher education, skilling opportunities or career choices involve mixing with boys and men (Jejeebhoy and Kumar, 2021). The following quotes from a qualitative study exploring girls' career aspirations in rural Rajasthan reiterate the ways in which social norms have compromised girls' lives (Jejeebhoy and Kumar, 2021):

> *People say that girls should not be educated much as this will make them change … there will be a problem in getting a girl married if she is qualified or educated or has a job* [Mother, age 39, completed BEd., daughter studying in Class 12].
>
> *Some people say that the girl goes out and no one knows where she goes. She should not be allowed to go alone. She will spoil the honour of her parents.* [Girl, age 18, completed Class 10, not in school, work or training, rural].
>
> *If she goes away [college/work] and some accident or gadbad [bad incident] … then what? If a girl goes off with someone and gets married, our society will keep passing comments… if a girl runs off with a boy (galatkaam), she won't be allowed back home.* [Mother, age 40, no formal education, daughter in Class 12, rural].

The combination of poverty and strong patriarchal structures results in restricting the agency of girls (15-19) and young women (20-24). Decision-making power on issues relating to them is far from universal (51-63%), freedom to move around without an escort is experienced by few (26-34%), and control over money is exercised by fewer than one half (35-47%) – adolescents are even more restricted than young women. Within marriage, violence is reported by one in six adolescents and one in four young women aged 20-24 and child marriage is experienced by almost one quarter. Together, these constraints on the lives of girls and young women effectively dents their chances of pursuing an education, building work aspirations and joining the modern employment sector (Table 6).

The pandemic and resulting lockdowns have not only meant that more girls than boys will discontinue their education, but also there is some suggestion that child marriages may have actually increased, as observed earlier, stalling the decline observed in previous years. The continued exclusion of girls and women from the development process generally raises questions about India's preparedness to attain the demographic dividend.

Table 6: Decision-making, freedom of movement, control over money, experience of marital violence and child marriage: Factors inhibiting girls and young women from exercising rights

	Ages 15-19	Ages 20-24
Decision-making autonomy Make decisions about own health care, householdpurchases, visiting friends/relatives	51	63
Freedom of movement Can go unescorted to market, health facility, outside village/community	26	34
Control over money Have money they decide on how to use	35	47
Violence in marriage Experience marital violence	18	25
Child marriage Among those aged 20-24, marriage below age 18		23

Source: IIPS and ICF, 2021

Reaping the demographic dividend

East and Southeast Asia have shown how the demographic dividend can be achieved – by adopting adolescent and youth focused policies and programmes, and investing appropriately in education, skilling, health and gender equity. India's investments in the social sector and in youth focused spending has been inadequate, generally far less than the experience of successful Asian countries would suggest. India's goal of becoming a major global economic force cannot be achieved without short- and medium-term investments that assure the rights of all young people to have access to quality education and mentoring, make informed life choices, and be assured of their rights, including those relating to marriage and reproduction. Goals will be thwarted without investments in decent job creation and in a well-prepared and employable youth population, particularly female.

Aside from the obvious need to boost public expenditure on the social sector, there are a number of promising and evidence-based leads for investment that focus on empowering young people and ensuring their employability – those focused on improving educational attainment and learning outcomes, those focused on building skills and access to career opportunities, and those focused on promoting gender egalitarian norms and exercise of rights. For example, in the schooling arena, conditional and unconditional cash and non-cash transfer (scholarships and vouchers, bicycles for secondary school) programmes spur both attendance and secondary school completion and have other indirect benefits, most notably, delaying marriage (Malhotra and Elnakib, 2021; Glewwe and Muralidharan, 2015; Muralidharan and Prakash, 2019; Petrosino et al., 2012; Gundi et al., 2021). Supplementary coaching for disadvantaged students/first time learners is essential to address their disadvantage, and has been shown to enhance learning outcomes and encourage school continuation (Glewwe and Muralidharan, 2015; Banerjee et al., 2007).

With regard to overall empowerment, bold gender transformative life skills education programmes at school and community levels are important. They build gender equity among both boys

and girls, raise awareness about health and rights, impart communication and negotiation skills to make informed decisions, foster critical thinking and a sense of self efficacy (Malhotra and Elnakib, 2021; UNFPA, 2016; Patton et al., 2016; Santhya et al., 2021). Among efforts to enhance female labour force participation, most promising are interventions offering skilling and career opportunities (Malhotra and Elnakib, 2021) that go beyond simply provide skilling or vocational training institutions. What is needed is a range of related services – generation of new 21st century skills and opportunities, career counselling, soft skills training, job search support, job-related mentoring as necessary, safe transport to access places of work, safe work place environment and overcoming attitudinal obstacles posed by gatekeepers (Malhotra and Elnakib, 2021; Jensen, 2012).

Other less evidence-based leads that are important for India include (a) fostering the integration of married girls and young women into the economy, with appropriate attention to the provision of childcare benefits and availability of part-time work; (b) engaging parents and other gatekeepers, changing norms, developing positive and 21st century socialisation practices, and shedding traditional biases against investing in women and girls; and (c) addressing the needs and rights of young migrants, supporting them to adapt to cultural and language barriers in destination states, access health and educational services, and generally claim the various rights and entitlements accessed by the native population.

As of today, even though many young people acquire secondary school education, percentages remain far from universal, and many, especially girls, become NEET. Given the evidence that conditional and unconditional cash transfer programmes hold promise, and the wide and growing availability of TVET opportunities, these are two areas that require strengthening and scaling. On the schooling front, we must: ensure a secondary school education for all; focus on learning outcomes; incorporate a career counselling component at the school level throughout secondary classes; and consider mainstreaming vocational training within the higher education system. On the TVET front, the priority should be on changing norms about the status of vocational versus academic training, guiding young people into vocational and academic streams for which they are qualified, in which they have interest and that will lead to careers for which there is a demand; facilitate entry into appropriate TVET programmes; and work with India's Skill Mission to highlight the need to engage the young, tailor programmes to meet their needs, and explore forging links with the education system. Simultaneously, what is needed is to map at district-level preferably the kinds and quantum of skills for which there is a demand, thereby enabling the channelling of young people into demand oriented training.

Conclusion

The Government of India's stress on economic growth without paying attention to empowering the young and ensuring opportunities in the labour force has come at a price. Jobless growth and limited investment in the social sector have meant that the education and employment of youth are affected,

youth enter the working ages without the necessary skills for the workforce, and work is simply unavailable to them. This paper sets a baseline on the human capital situation and potential for young people as of today. The current situation, as far as investment in youth is concerned, shows that learning outcomes are compromised, too few reach higher secondary or tertiary education or TVET, labour force participation is compromised, and unemployment levels are far greater for youth than the overall population. Young women and girls are particularly disadvantaged in all of these domains, and face huge constraints on exercising voice and choice. In short, although India's age structure puts it in an advantageous position to reap its demographic dividend, its neglect of ensuring a healthy, educated, skilled and empowered youth population makes it unlikely that this dividend will actually be realised. What is needed is a sea change in India's approach to the education, skilling and employment, and empowerment of youth and particularly women and girls, and a realisation that failure to do so will have severe consequences.

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