

Demographic Dividend in India: Myth or Reality?

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"Being the hottest Global market in both listed and unlisted Worlds, India is literally on a roll!"

"If I'm Betting On 1 Country In Asia, It's India; If I'm Betting On 2 Countries Then It's India Twice!" -

John Chambers-Chairman Emeritus Cisco Systems.

Abstract

India, one of the fastest-growing economies in the world, became the most populous country in 2023 as per United Nations reports. Among the multiple factors driving India's growth, the demographic dividend stands out as a transformative force that can potentially propel the nation towards becoming a developed country by 2047—realizing the vision of Viksit Bharat. A large working-age population not only enhances the labour supply but also expands the domestic market for goods and services. According to a study by the IMF (Aiyar and Mody, 2011), the demographic dividend could boost India's per capita GDP growth by about two percentage points annually over the next two decades. This study examines India's preparedness to harness this potential and highlights the associated opportunities and challenges. While China successfully capitalized on its demographic boom to become a global manufacturing hub, India's journey is hindered by skill shortages, weak infrastructure, and regulatory complexities. The study employs a qualitative approach to explore various dimensions of demographic transition and evaluates critical determinants such as education, health, skill development, and employment generation. It also analyzes current demographic trends and discusses the strategic initiatives required to convert the demographic opportunity into a sustained advantage. The findings suggest that a coordinated and inclusive policy framework is essential for India to fully realize the benefits of its demographic dividend and move towards equitable economic and social development.

Keywords: Demographic dividend; workforce; growth; Viksit Bharat; employment.

INTRODUCTION

The above statement is a testimony to the impressive growth story of India and its huge growth potential. Currently, India is one of the fastest-growing economies in the world. Recently India has also gained the distinction of being the most populous country in the world in 2023 as per the Reports of the United Nations. There are many drivers behind the impressive growth story of the country.

The demographic dividend is one such driver that has the potential to transform India into a developed country in the future and realize the vision of Viksit Bharat@2047. A large working-age population makes India attractive, not just from the labour market perspective but it also provides a large market for goods and services. A study conducted by IMF (Shekhar Aiyar and Ashoka Mody, 2011) also indicates that the demographic dividend could add about 2 percentage points per annum to India's per capita GDP growth over the next two decades. This article discusses a few major statistics concerning the demographic dividend in India which may benefit immensely towards achieving its vision of becoming a developed country by 2047, the preparedness of India to grab opportunities available, and challenges faced by the country which may restrict the ability of the nation to take the advantage of this golden opportunity presented in form of demographic dividend.

What is a Demographic Dividend?

The term demographic dividend was coined by David Bloom who attributed a large portion of the economic growth of East Asia from 1965 to 1990 to the region's working-age population, which led to an increase in productivity. Since then the concept of demographic division and its contribution to the process of economic

growth of an economy as one of the drivers of growth, has grabbed the attention of social scientists, intellectuals as well as policymakers.

According to United Nations Population Fund (UNFPA), demographic dividend means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)". A population's age distribution affects the consumption but also that of the economically dependent segments of society, whereas children and the elderly consume more than they create. Nations with high proportions of the working age population and declining child population can accelerate economic growth.

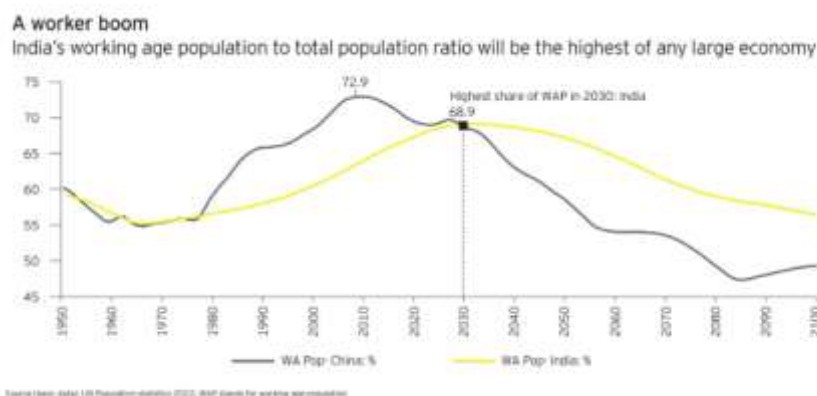
Researchers have offered empirical evidences for the positive impact of the demographic transition on economic growth. Bloom, Canning, and Malaney (2000) attributed East Asia's economic miracle to a major transition in the region's age structure. In studies based on Bloom, Canning, and Sevilla's (2003) approach, the ratio of the working-age population to total population, labor productivity, human capital, savings rate, trade policies, and other variables determined the long-term growth of per capita income. An important result of these studies is the positive impact of the ratio of the working-age population, which captures the age structure transition. Further, Mason (2006) has also concluded that the potential for the demographic dividend can be realized in countries that can provide an environment for economic development. Mason (2006) suggested that each country in the Asia and Pacific region should act now to harvest the first demographic dividend. Neha Jain (2015) concluded that India has a demographic dividend from mid-1970 to 2035, which can positively impact economic development through savings, investment, female labor force participation, and knowledge spillovers. Paramjit Singh and Surinder Kumar (2021), Dr.NagaraJ et al (2012) argued that for India to achieve a demographic dividend, it needs to adopt state-sponsored socio-economic policies for public health and education, as well as macroeconomic policies that optimize the use of human resources. Without these measures, the demographic dividend will remain a myth and a mirage. Divya, Chansoriaya, Ashish, Gupta. (2023), Jajati, Keshari, Parida., S., Madheswaran. (2023) suggested that India should take advantage of its demographic dividend by encouraging labor-intensive technology in small manufacturing enterprises and self-employment. They also discussed the potential loss of India's demographic dividend due to inadequate job growth in non-farm sectors and an increase in the elderly population.

Few Important Statistics About the Demographic Dividend in India

The most interesting part of the report released by the United Nations 2023 is - the working population of India, which includes the 15-64 age group, comprises 68% of the total population. Before discussing further on this topic it will be appropriate to know about the following facts :

- Over 600 million people in India are between the ages of 18 and 35, with 65% of them being under 35.
- The demographic dividend in India is predicted to last at least until 2055-2056 and to peak in 2041 when the country's working-age population (those between the ages of 20 and 59) is predicted to reach 59%.
- The percentage of the total population that is working age is depicted in the following graphic, along with a quick comparison with China. India's dependency ratio is expected to drop to 31.2% by 2030, the lowest level in the country's history.

Figure 1, Working Age Population (India Vs China)



- About 26% of people are under the age of 14, 67% are between the ages of 15 and 64, and 7% are over the age of 65. In comparison, 17% of Americans and 21% of Europeans are over 65.
 - India benefits from a young population (median age of 28.4 years), from the availability of labour as well as the opportunity to unleash the purchasing power of the young population.
- By 2056, India's young dependency ratio—the proportion of children under 15 compared to the whole population—is predicted to surpass the country's elderly dependency ratio, which measures the proportion of people over 65 in the overall population.
- India would continue to be the world's biggest supplier of human resources. India will account for about 24.3% of the additional global workforce during the next ten years. This is important since the developed world's population is aging quickly which may result in a short supply of labour force at the global level. These economies may also face challenges as there will be more burden on the government for providing pensions and health care system, thus leaving less funds for development purposes. Now it is the time for India to enjoy the benefits of being the most young nation in the world.

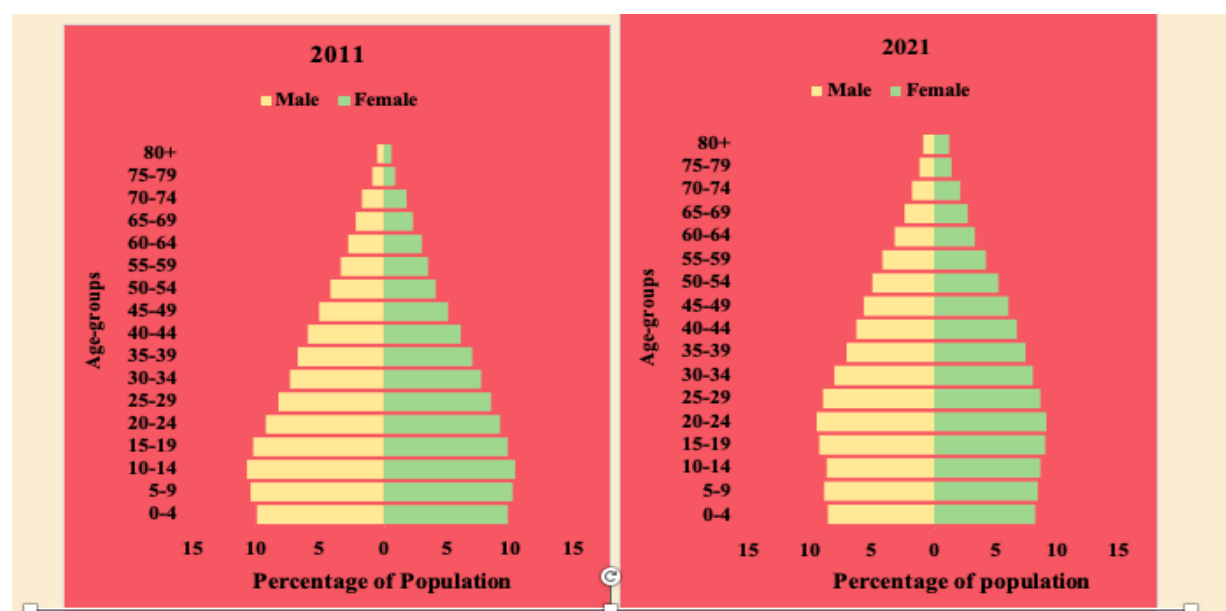
Various Dimensions of Demographic Dividends in India

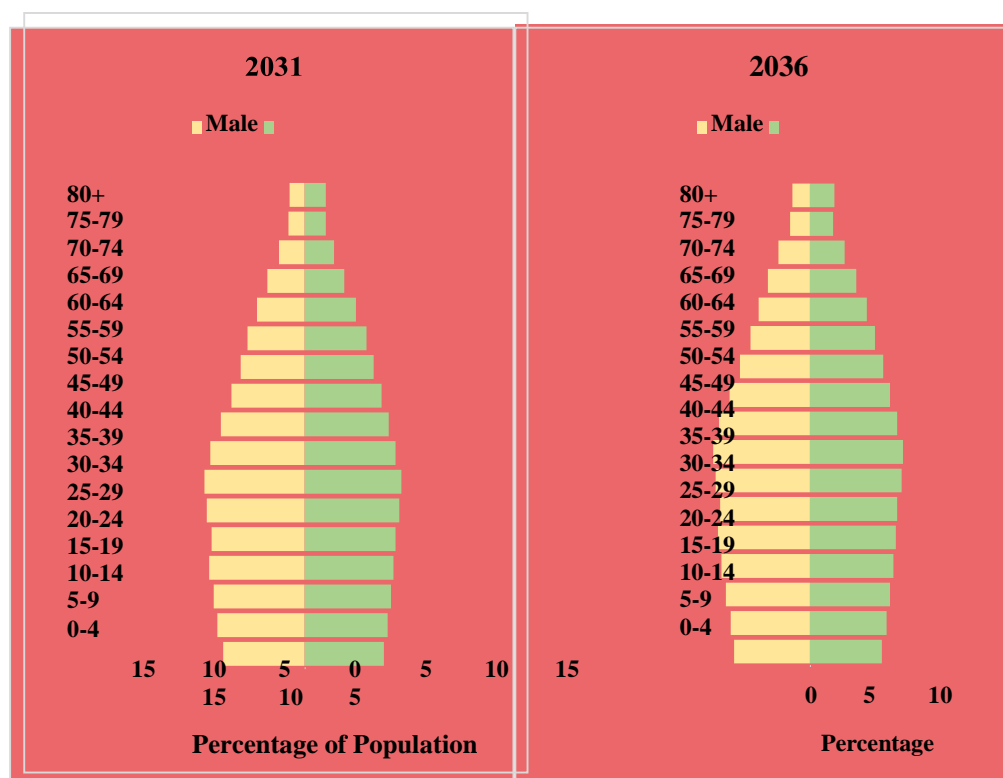
There are many dimensions of the demographic dividend that may pave the path to the success of the country's journey toward a Viksit Bharat by 2047 as discussed in the subsequent sections.

Age and Sex Structure of the Population

The demographic composition of a country, particularly the age and sex structure, significantly influences gender-related issues across various aspects of society. The age structure is primarily shaped by trends in fertility and mortality. It is projected that the proportion of the population aged under 15 years will decline due to decreasing fertility rates. Conversely, the proportion of individuals aged 60 years and above is anticipated to rise substantially during this period as shown in the following population pyramids :

Figure-2, Population Pyramids (2011-2036)





Source: Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020

Data indicate that the population pyramid will change in 2036, with the middle of the pyramid expanding and the base narrowing for males as well as females. Without question, if this massive labour force is deployed wisely, it can make a major contribution to the nation's growth and development and help the government realize its vision of Viksit Bharat.

Trends of Working Population

Changes in the working-age population's size have a significant impact on the size of the labour force and the patterns of labour migration between states. India's working-age population is expected to increase up till 2036 as depicted in the following table :

Table -1, Projected Population Characteristics as of March 2011-2036

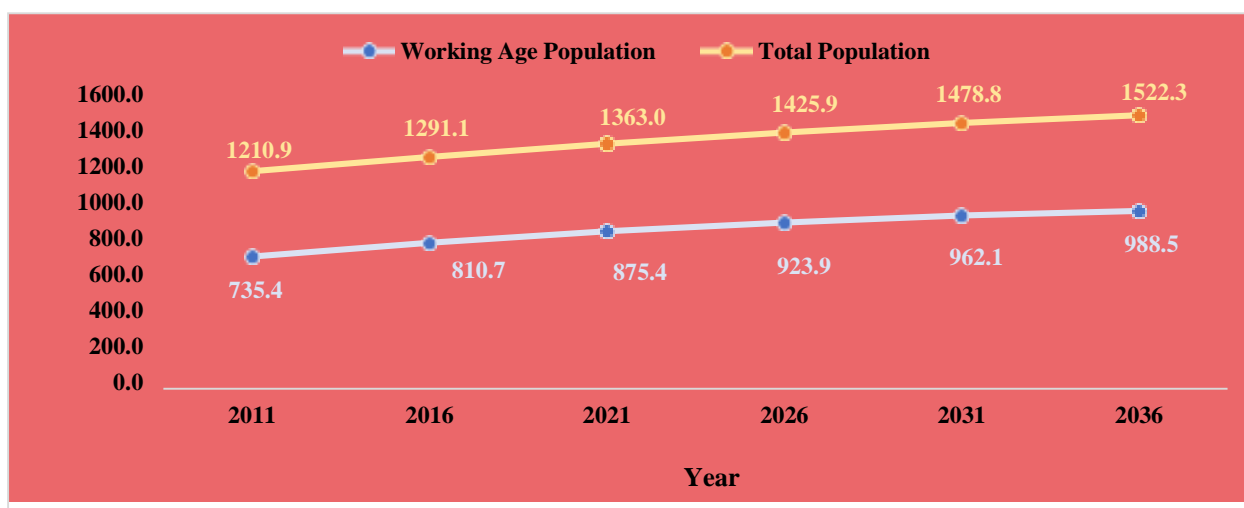
Indicator/ Year	Population by broad age group (000')			Proportion (percent)			Median age (years)	Dependency Ratio (%)		
	0-14	15-59	60+	0-14	15-59	60+		Young (0-14)	Old (60+)	Total (Young and old)
2011	373,893	735,424	101,538	30.9	60.7	8.4	24.92	50.8	13.8	64.6
2016	362,202	810,687	118,185	28.1	62.8	9.2	26.55	44.7	14.6	59.3
2021	349,9	875,4	137,5	25.	64.2	10.	28.34	40.0	15.7	55.

	90	46	70	7		1				7
2026	339,22	923,857	162,829	23.8	64.8	11.4	30.27	36.7	17.6	54.3
2031	323,258	962,091	193,426	21.9	65.1	13.1	32.38	33.6	20.1	53.7
2036	306,374	988,476	227,438	20.1	64.9	14.9	34.48	31.0	23.0	54.0

Source: Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020

As per the report of the Technical Group on Population Projections for India and States (2011-2036) Report, in 2011, 735 million people, or 60.7% of India's total population, belonged to the working-age group (15-59 years). It is anticipated that this group would increase with time, reaching 988.5 million by 2036 which is as high as 65 percent of the total population of the country as shown in the following figure. The rising number of working-age population presents an opportunity for the country to convert this into human capital to achieve a high rate of growth.

Figure -3, Number of People in Working Age Group (15-59 Years) and Total, 2011-2036



Ministry of Health & Family Welfare, July, 2020

Dependency Ratio

One important dimension of demographic dividend in India can be analysed with the data on the dependency ratio. The number of children (ages 0-14) and elderly adults (ages 60 and beyond) per 1000 working-age people (ages 15-59) is measured by the dependency ratio. The dependency ratio indicates possible needs for social support for these segments of the society which means that the economically active population and the economy as a whole must shoulder more of the cost. Furthermore, the ratio shows the burden of dependency on the working population. Besides, it also has implications in the context of the government budget where a fairly large proportion of the budget is expected to be spent on health and various programs meant for senior citizens leaving fewer resources to finance capital expenditure which is a pre-requisite to achieve the vision of Viksit Bharat. The change from high mortality and high fertility to low mortality and low fertility is reflected in this shift. In 2036, the overall reliance ratio will drop from 65% in 2011 to 54% as a result of these developments, as shown in Table No 1, but the dependency ratio for senior citizens (those over 60) is expected to rise, from 13.8% in 2011 to 23% by 2036.

Labour Market Indicates Positive Trends

One important dimension of demographic dividend can be understood through the labour force participation rate (LFPR). In rural areas, LFPR increased from 50.7% in 2017-18 to 60.8% in 2022-23 while for urban areas it increased from 47.6% to 50.4%. LFPR for males in India increased from 75.8% in 2017-18 to 78.5% in 2022-

23 and a corresponding increase in LFPR for females was from 23.3% to 37.0%. Also, nearly 49% of the total enrolment in higher education comprises female students resulting in a larger proportion of women's participation in the workforce in the years to come. These trends ensure that more labour force will be available for producing more goods and services thereby increasing the growth rate of the country.

It is very evident that without providing productive employment to the huge army of young workers of the country, the demographic dividend will remain just a nightmare. One measure used to evaluate the nation's employment situation is the Worker Population Ratio (WPR). The ratio provides information on the percentage of a nation's population that engages in active participation in the production of goods and services. WPR rose from 48.1% in 2017-18 to 59.4% in 2022-23 in rural areas and from 43.9% to 47.7% in urban areas. Male WPR in India climbed from 71.2% in 2017-18 to 76.0% in 2022-23, while female WPR increased from 22.0% to 35.9% during the same time period which is a very positive development from the viewpoint of economic growth.

Decreasing the Unemployment Rate (UR) is also a very important dimension which reflects that the young population also has an opportunity to use its skills and talent in productive employment resulting in more production and higher economic growth. In rural areas, UR decreased from 5.3% in 2017-18 to 2.4% in 2022-23 while for urban areas it decreased from 7.7% to 5.4%. UR for males in India decreased from 6.1% in 2017-18 to 3.3% in 2022-23 and the corresponding decrease in UR for females was from 5.6% to 2.9%.

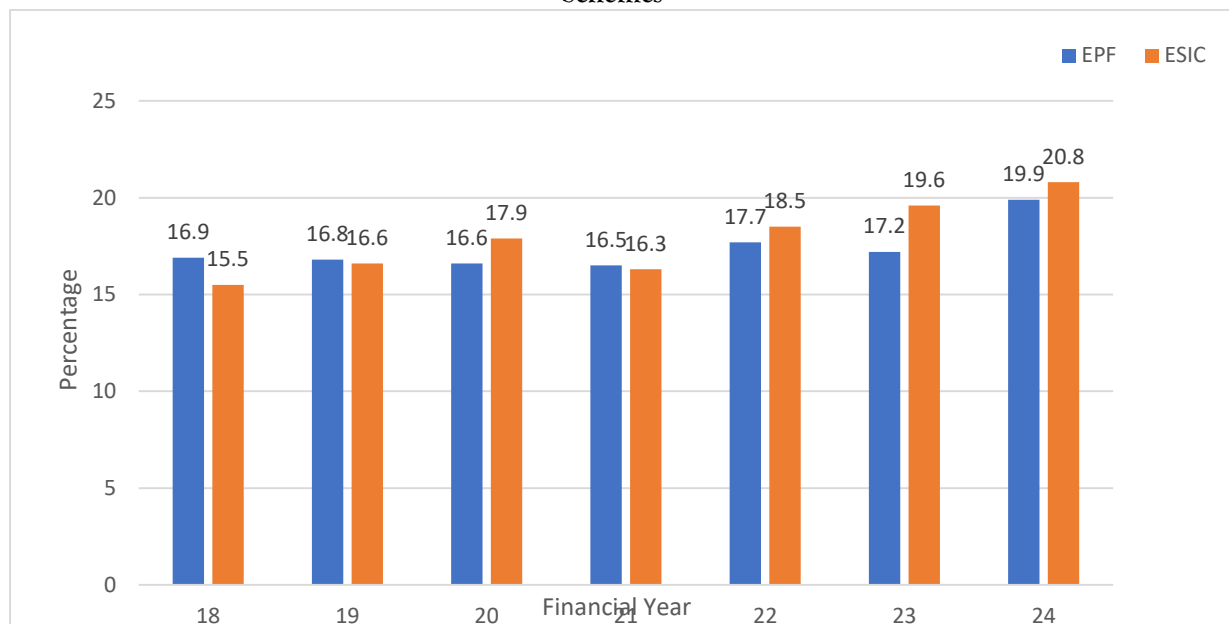
One of the contributing factors responsible for the declining rate of employment in the country has been the initiative of the Government to skill the youth and equip them with skills which help them to get a better employment opportunity. As reported by the Ministry of Statistics and Program Implementation, the Government initiative has delivered the results as over a fifth of certified people under the Pradhan Mantri Kaushal Vikas Yojana have been placed by December 2023, as shown in the following table :

Table 2, No of Trained and Placed Candidates under Pradhan Mantri Kaushal Vikas Yojana

	Trained Candidates	Certified Candidates	Placement Percentage
PMKVY 1.0	19,86,016	14,516,36	18.4
PMKVY 2.0	1,10,00,708	91,57,547	23.4
PMKVY 3.0	7,37,502	4,32,062	10
Overall	1,37,24,226	1,10,41,245	22.2

Source: PMKVY Dashboard

One crucial fact observed by looking at demographic data is related to women's share in informal jobs which is also rising. Women's share in formal jobs is the highest since FY 2018 as shown in the following figure :

Figure-4, New female subscribers as the proportion of total fresh subscriptions to social security Schemes

Statista Research Department, Feb 22, 2024

Large Pool of English-speaking Youth with Science and Technology Background

Also, one differential factor in favour of the country is that India has the largest pool of English-speaking graduates, and many of them have backgrounds in Science and Technology. India is the global leader in Science and Technology and the annual increase in this pool is estimated at 2.14 million graduates. There is no need to reiterate how India has leveraged its demographic advantage in the IT export and BPO service sector. Not only this, many other sectors of the economy such as construction, public services, labour-intensive manufacturing, trade, transport, etc have a great potential to absorb the unskilled and semiskilled workforce resulting in a high growth rate for the economy in the coming future.

Demographic Dividend Acts as Pull Factor for FDI

Demographic Dividend also acts as a pull factor for FDI inflows in the country and this has been proven by many studies done in this field. On the one hand, it provides cheaper labour to corporations thereby increasing their competitiveness globally, on the other hand, it presents a golden opportunity for these corotates in the form of a huge market for their goods and services as the major chunk of the population falls in the working group with continuously increasing purchasing power. Some estimates on India's consumption story are worth mentioning. It has been estimated that Private Final Consumption Expenditure (PFCE) has grown at a CAGR of 11.3% (in nominal terms) over the last 10 years as against a nominal GDP growth rate of 10.6%. The ratio of PFCE to GDP has increased from 55% to 60%. We cannot deny the role of credit-driven consumption in this regard. For example, from 2016-17 to 2021-22, outstanding personal loans of scheduled commercial banks more than doubled from INR 16.2 trillion to INR 33.85 trillion (US\$ 423b). Moreover, in recent years, the government's initiatives to promote financial inclusion, digitized payment systems, and fintech have been the game changers and enabled financial institutions to provide a better credit assessment of people. No doubt that all these developments will further fuel the consumption story of the country. Indian Youth has also contributed significantly by making India a hub for the start-up ecosystem. India ranks globally 3rd in the Start-Up ecosystem and

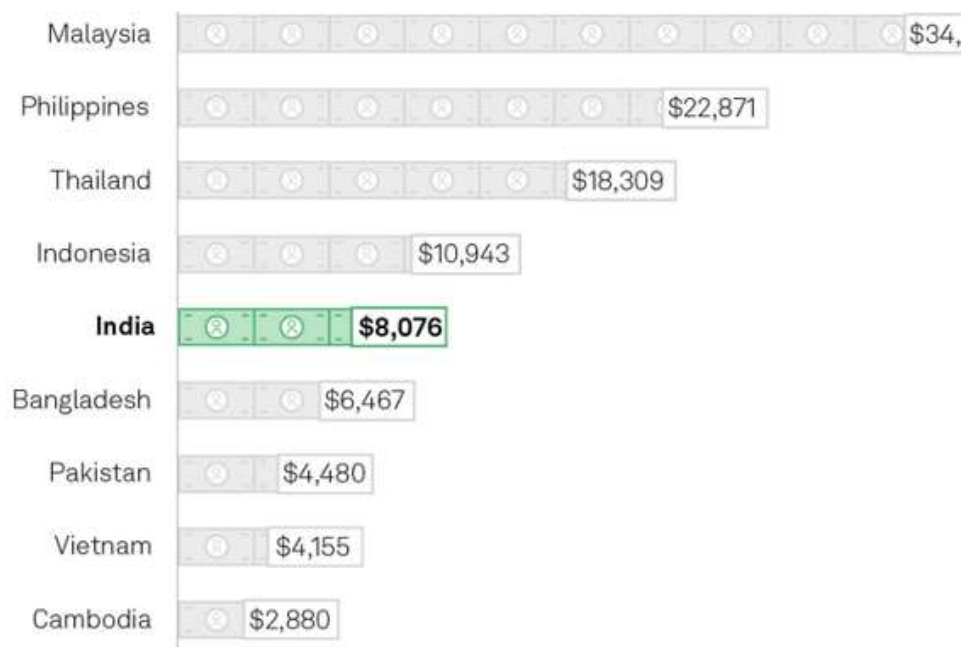
also in terms of the number of Unicorns where young entrepreneurs have all the potential to contribute to the effort of making the country developed by 2047.

What Are The Major Challenges?

No doubt that a demographic dividend for India is one of the greatest opportunities to boost economic growth, but the path is not that easy rather it is full of challenges. One major challenge that may restrict our capability to grab this opportunity is the lack of skilled labor. We may feel proud to have a huge quantity of young population but cannot ignore its qualitative dimensions. The lack of employable skills in young Indians has left companies unsatisfied, according to the Skill Financing Report 2023. Approximately 78% of the nation's youth are unemployed or underemployed. According to the research, India also ranks 60th in the world for overall skill competency. Only 4.7% of Indian workers had received skill training up until 2015, according to the State of the World Population Report, compared to 80% in Japan, 52% in the USA, 90% in South Korea, and 68% in the UK. For industries looking to advance up the value chain, this skills gap poses a serious risk, imperilling India's ambitions to become a global center of manufacturing. According to the Manpower Group Employment Outlook Survey for the second quarter of 2023, 79.0% of businesses in the industrial and materials sectors have had difficulty finding talent.

As per S&P Global Market Intelligence, the lower skill level in Indian manufacturing has resulted in an average value addition per employee of \$8,076 in 2021. This figure is significantly lower than that of many emerging countries, as illustrated below:

Figure 5, Per Employee Value added

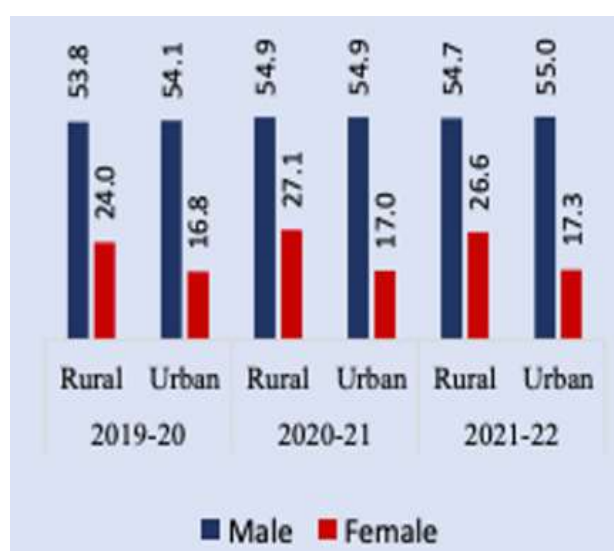


Data compiled June 2, 2023.
Source: S&P Global Market Intelligence.
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Many Western countries and China have successfully engaged the vast army of labour in their revolutionary industrial development but India skipped this mass industrial revolution stage. Its growth has been fuelled by a booming services sector that specializes in information technology. The absence of a vibrant manufacturing sector makes it very challenging to absorb millions of young people entering the workforce each year. Moreover, many experts have labelled India's growth as jobless growth.

Another challenge is gender gap with respect to women's engagement in the labour force. In the case of WPR also, the disparity between women and men is still high. The statistics clearly show that women's status is far worse than men's (the WPR of the female population is less than half that of men in rural regions and less than one-third that of men in urban areas). This suggests that women are significantly less likely than men to be employed, which may be the result of a variety of socioeconomic issues. The following figure shows the worker population ratio of males and females in India:

Figure 6, Worker Population Ratio



Source : Periodic Labour Force Survey (PLFS) Annual Report 2022-2023, Ministry of Statistics & Programme Implementation

A process of inclusive and sustainable development must include women's engagement in the labour force and their ability to find adequate employment. Women still face numerous obstacles when trying to enter the labour market and find decent work. They also face a number of difficulties when trying to enter the market, such as finding employment, choosing the right job, unfavourable work conditions, employment security, wage equality, discrimination, and last but not least balancing the competing demands of work and family life. Furthermore, women predominate in the unorganized economy, where they typically have the least formal protection and are most exposed to the risk of exploitation. This wide gap in male and female representation in the workforce may be reduced by taking some steps to introduce better incentive mechanisms, training, job reservations, and a safe workplace environment.

One serious challenge is rapidly changing technology and the advent of AI which pose a threat to the workforce available. There is disagreement over how AI will affect the economy and unemployment rates. AI is both generating new employment opportunities and displacing existing ones, especially in sectors of the economy that mostly depend on repetitive and regular work. A World Economic Forum analysis states that by 2025, artificial intelligence will have generated 133 million new employment while displacing 75 million existing ones worldwide. This indicates that while there would be a net gain of 58 million jobs

worldwide, some industries will still see significant job displacement. In such a situation, the country may have a big challenge of training and educating the laborers to equip them with the skills needed to adapt to new job roles. According to the Global Business Coalition for Education (GBC-Education), United Nations Children's Fund (UNICEF), and the Education Commission, more than 50% of Indian youth are not on track to have the education and skills necessary for employment by 2030. It is necessary to keep these statistics in mind when we talk about measures to improve talent acquisition across different sectors of Industry. Upgrading technical skills for the young generation should go hand in hand with technical advancement ..

This can be achieved through offering high-quality education, raising awareness of colleges and universities, launching new educational initiatives globally, offering career counselling and mentorship programmes, and fostering the development of competitive skills through internships and training. The youth can become informed, talented, and prepared to compete with their peers around the world. Young people have founded the majority of start-ups, suggesting potential for leveraging demographic dividends, but there are many doubts about their long-term viability. Studies indicate that approximately 90% of new ventures fail. Roughly 90% of startups make it through their first year. Still, seventy percent of them fail in the following five years.

The Way Ahead

It is now evident that there are numerous obstacles to overcome before the advantages of a prospective demographic dividend can be fully realised. The growing working-age population may raise unemployment resulting in social and economic risk, if policies are not implemented properly. The Indian government is well aware of this and to reap the benefits of the demographic dividend initiated many programs such as the establishment of the Ministry of Skill Development and Entrepreneurship (MDE), Skill India Mission, "Make in India, Make for the World", Atmanirbhar Bharat, Start-up India Mission Shakti, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) are few to name.

There will probably be more trained labour available for manufacturing and other industries as a result of government efforts to improve education. A comprehensive foundation for transforming the education system by 2030 has been laid by announcing the National Education Policy, 2020. The capacity of the country to upskill its workforce is a critical component of its aspirations to become a global manufacturing hub and a developed nation by 2047 by harnessing its demographic dividend. Progress is already underway, per year approximately 10 million young people are being trained under the Skill India program .

Even with the government's proactive efforts, there is still much to be accomplished. It is a pressing need because the window of opportunity is shrinking and, if India does not act fast, its demographic dividend may easily become an unemployment nightmare and it will not take time to turn one of its greatest assets into a major liability. However, to fully benefit from this demographic dividend, India needs to address challenges such as low human capital, unskilled labour, inadequate social infrastructure, skill development, and job creation for the youth population. India must take advantage of this demographic opportunity by investing in human resources and creating an environment conducive to productivity and asset accumulation. In such a situation, it is imperative that all stakeholders must work together and proactively to take advantage of this opportunity to make India a developed nation. A forward-looking policy that takes into account population dynamics, healthcare, education and skills, gender sensitivity, and giving the younger generation rights and choices will be crucial for realising its vision of Viksit Bharat by 2047.

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