EduTap

SUMMARY SHEET

Demographic Trends

Contents

1 Introduction

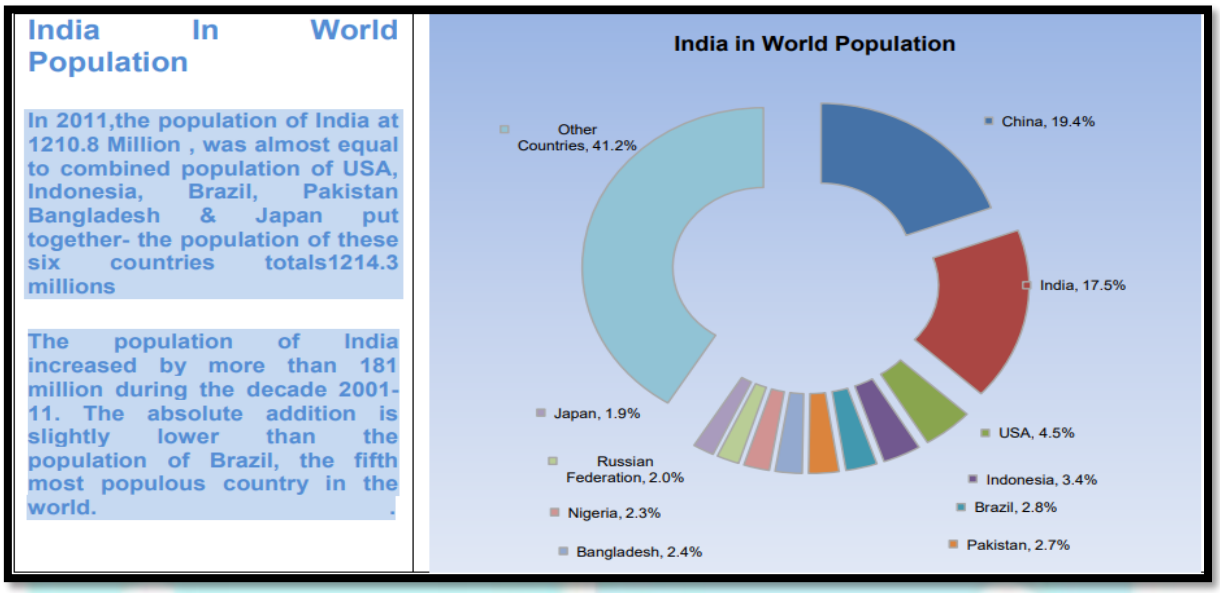
India, like many other countries, has made significant strides in its development journey from its early days where maintaining relatively high fertility levels was essential for the survival of the species because of high mortality rates due to famines, accidents, illness, infections, and war. Over the years, better equipped in dealing with diseases and vagaries of nature, it has witnessed significant increase in life expectancy along with steep fall in mortality.

2 Size, Growth and Structure

2.1 Size

- **The second most populous country on earth**

  India accounts for more than 17 per cent of world population with meagre 2.4 per cent of the world surface area. In contrast, the USA accounts for 7.2 percent of the surface area with only 4.5 percent of the world population



- **The state wise population distribution**
  - As per the recent census 2011 indicates that UP continues to be the most populous state with about 200 million people (16 per cent of total population).
  - States of Maharashtra and Bihar (9 per cent of the total population each) have made the transition to more than 100 million population categories.
  - Twenty States and Union Territories now have a population of over ten million. On the other extreme, there are five States and Union Territories in the country that are yet to reach the one million mark.
- **Decadal Growth rate**

  Decadal growth rate of population in India between **2001-2011 was 17.64%.** It decreased from **21.54%** during 1991-2001. 2001-2011 decade for the first time (except 1911-1921) has added lesser number of people than the previous decade**.** The **annual growth rate** of India's population is **1.64 per cent** (2011).

2.2 Growth of Population

- **Definition**: Growth of population is the change in the number of people living in a particular area between two points of time. Its rate is expressed in percentage.
- **Components of Population growth**: It has two components namely, **natural and induced**. While the natural growth is analysed by assessing the crude birth and death rates, the induced components are explained by the volume of inward and outward movement of people in any given area. The decadal and annual growth rates of population in India are both very high and steadily decreasing over time. There exist various phases of growth.

2.2.1 Phases of growth

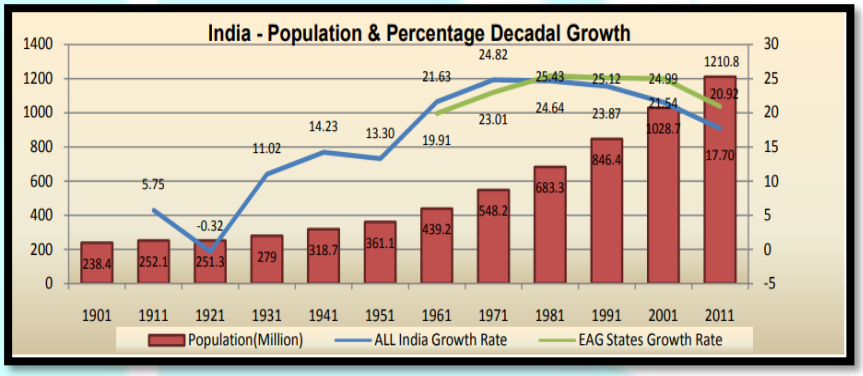
The growth rate of population in India over the last one century has been caused by annual birth rate and death rate and rate of migration and thereby shows different trends. There are **four distinct phases of growth** identified within this period:

1. **Phase I (1901-1921)**: The period from 1901-1921 is referred to as a **period of stagnant or stationary phase of growth of India's population**, since in this period growth rate was very low, even recording a negative growth rate during 1911-1921. Both the birth rate and death rate were high keeping the rate of increase low. Poor health and medical services, illiteracy of people at large and inefficient distribution system of food and other basic necessities were largely responsible for a high birth and death rates in this period.
2. **Phase II (1921- 1951):** The decades 1921-1951 are referred to as the **period of steady population growth**. An overall improvement in health and sanitation throughout the country brought down the

mortality rate. At the same time better transport and communication system improved distribution system. The crude birth rate remained high in this period leading to higher growth rate than the previous phase. This is impressive at the backdrop of Great Economic Depression, 1920s and World War II.

3. **Phase III (1951-1981)**: The decades 1951-1981 are referred to as **the period of population explosion in India,** which was caused by a rapid fall in the mortality rate but a high fertility rate of population in the country. The average annual growth rate was as high as 2.2 per cent. It is in this period, after the Independence, that developmental activities were introduced through a centralised planning process and economy started showing up, ensuring the improvement of living condition of people at large. Consequently, there was a high natural increase and higher growth rate. Besides, increased international migration bringing in Tibetans, Bangladeshis, Nepalese and even people from Pakistan contributed to the high growth rate.
4. **Phase IV (Post 1981)**: In the post 1981 till present, the growth rate of country's population though remained high, has started slowing down gradually. A downward trend of crude birth rate is held responsible for such a population growth. This was, in turn, affected by an increase in the mean age at marriage, improved quality of life particularly education of females in the country etc.

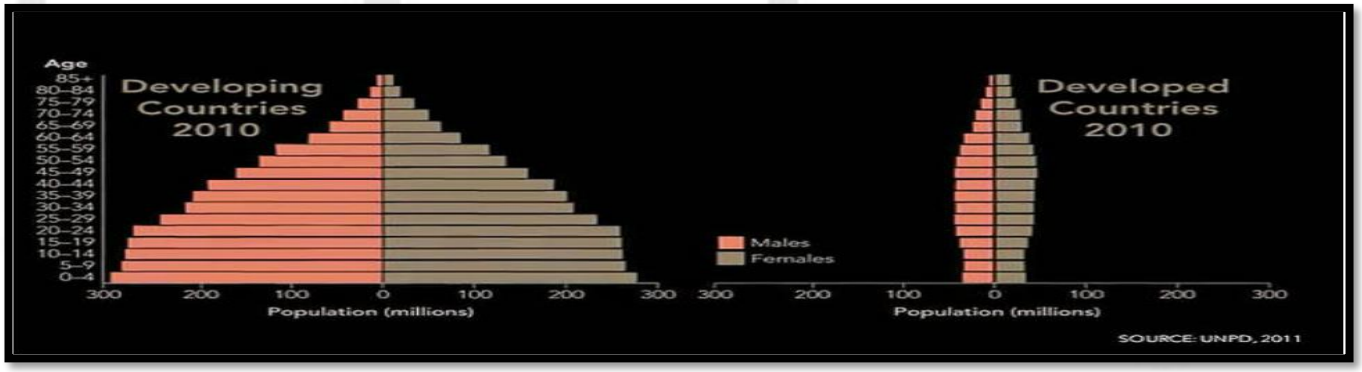
2.3 Population Structure



- Population Pyramids represent complex changes in age structure of the population. In developed countries, the shape is almost cylindrical instead of a pyramid because of the high life expectancy, low fertility, and relatively low population in reproductive age group. In these countries, advantages of stable population are challenged by higher dependency ratio since the working age population is less.
- In contrast to the above, population of most of the developing countries including India consists of large proportions of children and persons in reproductive age group. For now, and the near future, population projections for India augur well since it will have a large segment of population in the working age group, with considerably decreased dependency ratio putting it in a position to reap **demographic dividend**.

Definition of Population Pyramid

- The population pyramid represents **the breakdown of the population by gender and age at a given point in time**. It consists of two histograms, one for each gender (by convention, men on the left and women on the right) where the numbers are shown horizontally and the ages vertically.
- The numbers by gender and by age depend on interactions between **fertility, mortality, and migrations**. The shape of the pyramid and its variations over the years depend above all on the variations in fertility.



3 Population Composition

3.1 Rural – Urban Composition

State/UT Code	India/State/ Union Territory	Population		Percentage of Urban Population
		Rural	Urban	
	India	**833087662**	**377,105,760**	**31.16**
01	Jammu & Kashmir	9,134,820	3,414,106	27.21
02	Himachal Pradesh	6,167,805	688,704	10.04
03	Punjab	17,316,800	10,387,436	37.49
04	Chandigarh	29,004	1,025,682	97.25
05	Uttarakhand	7,025,583	3,091,169	30.55
06	Haryana	16,531,493	8,821,588	34.79
07	NCT of Delhi	419,319	16,333,916	97.50
08	Rajasthan	51,540,236	17,080,776	24.89
09	Uttar Pradesh	155,111,022	44,470,455	22.28
10	Bihar	92,075,028	11,729,609	11.30
11	Sikkim	455,962	151,726	24.97
12	Arunachal Pradesh	1,069,165	313,446	22.67
13	Nagaland	1,406,861	573,741	28.97
14	Manipur	1,899,624	822,132	30.21
15	Mizoram	529,037	561,977	51.51
16	Tripura	2,710,051	960,981	26.18
17	Meghalaya	2,368,971	595,036	20.08
18	Assam	26,780,516	4,388,756	14.08
19	West Bengal	62,213,676	29,134,060	31.89
20	Jharkhand	25,036,946	7,929,292	24.05
21	Orissa	34,951,234	6,996,124	16.68
22	Chhattisgarh	19,603,658	5,936,538	23.24
23	Madhya Pradesh	52,537,899	20,059,666	27.63
24	Gujarat	34,670,817	25,712,811	42.58
25	Daman & Diu	60,331	182,580	75.16
26	Dadra & Nagar Haveli	183,024	159,829	46.62
27	Maharashtra	61,545,441	50,827,531	45.23
28	Andhra Pradesh	56,311,788	28,353,745	33.49
29	Karnataka	37,552,529	23,578,175	38.57
30	Goa	551,414	906,309	62.17
31	Lakshadweep	14,121	50,308	78.08
32	Kerala	17,455,506	15,932,171	47.72
33	Tamil Nadu	37,189,229	34,949,729	48.45
34	Puducherry	394,341	850,123	68.31
35	Andaman & Nicobar Islands	244,411	135,533	35.67

- **Life Expectancy at birth in India – 70 years as per World Bank data.**
- As per Census 2011, **68.8% population resided in rural areas.**
- The states like **Bihar and Sikkim** have **very high percentage of rural population**.
- The states of **Goa and Maharashtra** have **only little over half of their total population residing in villages.**
- The **Union Territories**, on the other hand, have **smaller proportion of rural population**, except Dadra and Nagar Haveli (53.38 per cent)
- **Urban population** in India is **less** (31.16 percent) but **growing very fast** due to **increasing economic development** and **rural – urban migration.**
- The rural-urban migration is conspicuous in the case of urban areas along the main road links and railroads in the North Indian Plains, the industrial areas around **Kolkata, Mumbai, Bengaluru – Mysuru, Madurai – Coimbatore, Ahmedabad – Surat, Delhi – Kanpur and Ludhiana – Jalandhar.**
- In the agriculturally stagnant parts of the **middle and lower Ganga Plains**, **Telangana**, **non-irrigated Western Rajasthan**, remote, hilly, tribal areas of **Northeast**, along the **flood prone areas** of Peninsular India and along **eastern part of Madhya Pradesh**, the degree of **urbanisation has remained low**.

3.2 Linguistic Composition

- India has over **150 spoken languages** with more than **500 dialects**. There are **22 scheduled languages** identified by the government.
- The speakers of major Indian languages belong to **four language families**, which have their **sub-families and branches** or groups. The list of four language families is given below.
- Among the scheduled languages, the **speakers of Hindi have the highest percentage.**
- The smallest language groups are Sanskrit, Bodo, and Manipuri speakers (2011). However, it is noticed that the linguistic regions in the country do not have a sharp and distinct boundary, rather they gradually merge and overlap in their respective frontier zones.

Family	Sub-Family	Branch/Group	Speech Areas
Austric (Nishada) 1.38%	Austro-Asiatic	Mon-Khmer	Meghalaya, Nicobar Islands
		Munda	West Bengal, Bihar, Orissa, Assam, Madhya Pradesh, Maharashtra
	Austro- Nesian		Outside India
Dravidian (Dravida) 20%		South-Dravidian	Tamil Nadu, Karnataka, Kerala
		Central Dravidian	Andhra Pradesh, M.P., Orissa, Maharashtra
		North Dravidian	Bihar, Orissa, West Bengal, Madhya Pradesh
Sino-Tibetan (Kirata) 0.85%	Tibeto - Myanmari	Tibeto-Himalayan	Jammu & Kashmir, Himachal Pradesh, Sikkim
		North Assam	Arunachal Pradesh
	Siamese-Chinese	Assam- Myanmari	Assam, Nagaland, Manipur, Mizoram, Tripura, Meghalaya
Indo - European (Aryan) 73%	Indo-Aryan	Iranian	Outside India
		Dardic	Jammu & Kashmir
		Indo-Aryan	Jammu & Kashmir, Punjab, Himachal Pradesh, U.P., Rajasthan, Haryana, M.P., Bihar, Orissa, West Bengal, Assam, Gujarat, Maharashtra, Goa.

3.3 Religious Composition

- The spatial distribution of religious communities in the country shows that there are certain states and districts having large numerical strength of one religion, while the same may be very negligibly represented in other states.
- **Hindus** are distributed as a major group in many states (ranging from 70 - 90 per cent and above) except the districts of states along Indo- Bangladesh border, Indo-Pak border, Jammu & Kashmir, Hill States of North-East and in scattered areas of Deccan Plateau and Ganga Plain.
- **Muslims,** the largest religious minority, are concentrated in Jammu & Kashmir, certain districts of West Bengal and Kerala, many districts of Uttar Pradesh, in and around Delhi and in Lakshadweep. They form majority in Kashmir valley and Lakshadweep.
- The **Christian population** is distributed mostly in rural areas along the Western coast around Goa, Kerala and also in the hill states of Meghalaya, Mizoram, Nagaland, Chotanagpur area and Hills of Manipur.
- **Sikhs** are mostly concentrated in relatively small area of the country, particularly in Punjab, Haryana, and Delhi.
- **Jains** have major concentration in the urban areas of Rajasthan, Gujarat, and Maharashtra, while the Buddhists are concentrated mostly in Maharashtra. The other areas of Buddhist majority are Sikkim, Arunachal Pradesh, Ladakh, Tripura, and Lahaul and Spiti in Himachal Pradesh.
- The other religions of India include Zoroastrians, tribal and other indigenous faiths, and beliefs. These groups are concentrated in small pockets scattered throughout the country.

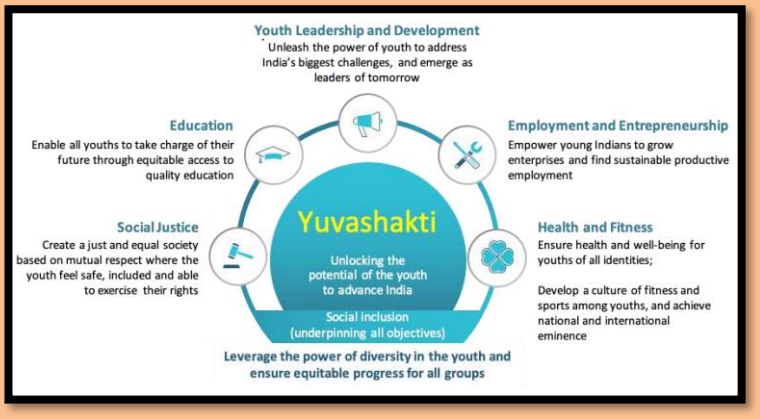
3.4 Age Structure

- According to Census 2011, the **share of adolescents** i.e., up to the age group of **10-19 years** is about **20.9 per cent** (2011), among which **male adolescents** constitute **52.7 per cent** and **female adolescents** constitute **47.3 per cent.**
- Moreover, share of people in the **working age (between 15 and 59 years)** is **more than 60%.**
- This **large share of young and economically productive people** in the population can be **very helpful** for the economy. This is known as **Demographic Dividend;** the concept is discussed in detail later in the document.
- The **adolescent** population is regarded as the **youthful** population having **high economic and social potentials**, but at the same time they are **quite vulnerable if not guided properly.**

- There are **many challenges** for the society as far as these adolescents are concerned, some of which are
  - lower age at marriage,
  - illiteracy – particularly female illiteracy,
  - school dropouts,
  - low intake of nutrients,
  - high rate of maternal mortality of adolescent mothers,
  - high rate of HIV and AIDS infections,
  - physical and mental disability or retardedness,
  - drug abuse and alcoholism,
  - juvenile delinquency and commitment of crimes, etc.
- The Government of India realizing the potential of the youth of the country, came up with National Youth Policy, 2014 to channelize their energy in nation building.

The Government has prepared a new draft **National Youth Policy (NYP) 2021** after reviewing the existing draft of National Youth Policy, 2014.

- **Ministry**: Ministry of Youth Affairs and Sports.
- **Aim:** The new draft NYP envisages a ten-year vision for youth development that India seeks to achieve by 2030.
- The new draft NYP seeks to catalyse widespread action on youth development across five priority areas:
  1. Education
  2. Employment & entrepreneurship
  3. Youth leadership & development
  4. Health, fitness & sports
  5. Social justice



The details of the benefits and **objectives envisaged in the draft National Youth Policy** are given below:

1. The policy draws a detailed roadmap towards the vision outlined for the youth in the coming decade and delineates the actions within each priority area.
2. The policy envisions an **education system in sync with National Education Policy, 2020** that imparts career opportunities and life skills to all young people.
   - It ensures that the youth have access to sustainable livelihood opportunities that encourages them to stay within and revive the rural economy, generate employment via micro-region-specific strategies, foster entrepreneurship, and social entrepreneurship, and support the informal and emerging gig economy.
3. **To develop India's youth**, both men and women, **as leaders of tomorrow,** the policy prescribes strengthening the volunteering ecosystem, expanding opportunities for leadership development and mobilising technology to establish a vibrant youth enablement platform.
   - Further efforts for the inclusion of marginalised and disadvantaged youths in volunteering and leadership opportunities are identified.
4. **The health and well-being of the youth**, especially young women of reproductive age, will be ensured by strengthening preventative and palliative healthcare, especially for mental health, substance abuse disorders and sexual and reproductive health issues that are critical among this demographic.
   - The policy purports a progressive and essential approach to mobilising technology and data to improve healthcare delivery and specific interventions to provide the marginalised youth with access to quality healthcare.
   - The policy also proposes **strengthening the overall fitness of youth** by building a vibrant culture of sports and fitness.
5. The policy outlines actions that will empower the youth and ensure their safety, strengthen the legal system for the quick delivery of justice and provide holistic support for the rehabilitation of juveniles.

- Special efforts are prescribed to ensure **social justice for marginalised and vulnerable youths**.

6. The policy is **a roadmap for the development of youth today** to ensure a bright future for India tomorrow.
   - This national-level framework will be adopted by states that will formulate their youth policies to serve the development needs of the region. The policy prescribes the necessary actions for various ministries in line with the respective thematic area.

Significance of the move

- **Youth development has been one of the primary agendas of the government:** However, experts believe that a new policy dedicated to the youth might contribute to their overall development.
- It is aligned with the Sustainable Development Goals (SDGs) and serves to unlock the potential of the youth to advance India.
- **Social inclusion**: Each priority area is underpinned by the principle of social inclusion keeping in view the interests of the marginalised sections.

3.5 Sex Composition

- **National Ratio in Census 2011 = 940 (improved from 933 in the 2001 census)**.
- **States/UTs having highest Sex Ratios**: Kerala – 1084, Puducherry – 1038 [* UT having highest sex ratio], Tamil Nadu – 995.
- **States/UTs having Lowest Sex Ratios**: Daman and Diu – 618, Dadra and Nagar Haveli – 775, Chandigarh-818, Haryana – 877 [* State having lowest sex ratio].
- **Child Sex Ratio (sex ratio in age group 0-6 years): 914 (declined from 927 in 2001).**
- Declining child sex ratio in India indicates that the sex ratio of India may further decline in future.

3.6 Literacy Rate in India 1951- 2011

- **Literacy Rate of India**: **74.04%**
- **Male Literacy Rate of India**: 82.14%
- **Female Literacy Rate of India**: 65.4%
- **States/UTs having Highest Literacy Rates in India**: Kerala – 93.91%, Lakshadweep -92.28 %, Mizoram – 91.58%
- **States/UTs having Lowest Literacy Rates in India**: Bihar – 63.82%, Arunachal Pradesh – 66.9 %, Rajasthan – 67%.
- Kerala has the highest Female Literacy rate (91.98%). Mizoram ranks second.
- Rajasthan has the lowest Female Literacy rate (52.66%). Bihar ranks second.
- Lakshadweep has the highest Male Literacy rate (around 96%). Kerala ranks second.
- Bihar has the lowest male Literacy rate (73.39%). Arunachal ranks second.

Census Year	Persons	Males	Females	Male-Female gap in literacy rate
1	2	3	4	5
1951	18.33	27.16	8.86	18.30
1961	28.3	40.4	15.35	25.05
1971	34.45	45.96	21.97	23.98
1981	43.57	56.38	29.76	26.62
1991	52.21	64.13	39.29	24.84
2001	64.83	75.26	53.67	21.59
2011	74.04	82.14	65.46	16.68

3.7 Composition of Working Population

- **Types of workers**: The population of India according to their economic status is divided into three groups, namely, **main workers, marginal workers, and non-workers.**
- **Labour Force of the country**: The main and marginal workers and non workers who are seeking employment are included in the labour force of the country.
- **High Unemployment Rate**: It is observed that in India, **the proportion of workers (both main and marginal) is only 39.8 per cent** (Periodic Labour Force Survey July 2020 - June 2021) leaving a vast majority of about 60 per cent as non-workers.
  - This means for all ages combined, less than half of the country's population is actively engaged in economically productive activities.
  - **WPR (Worker Population Ratio**) is defined as the percentage of employed persons in the population.

- **High dependent Population**: This indicates an economic status in which there is a larger proportion of dependent population, further indicating possible existence of large number of unemployed or under employed people.
- **Analysis of working population in Different States/ Union territories**: The proportion of working population, of the states and Union Territories show a moderate variation from about 39.6 per cent in Goa to about 49.9 per cent in Daman and Diu.
  - The states with **larger percentages of workers** are Himachal Pradesh, Sikkim, Chhattisgarh, Andhra Pradesh, Karnataka, Arunachal Pradesh, Nagaland, Manipur, and Meghalaya.
  - Among the Union Territories, Dadra and Nagar Haveli and Daman and Diu have higher participation rate.
- **Work Participation Rate**: It is understood that, in the context of a country like India, the work participation rate tends to be higher in the areas of lower levels of economic development since large number of manual workers are needed to perform the subsistence or near subsistence economic activities.
- **The occupational composition of India's population**: It indicates engagement of an individual in farming, manufacturing, trade, services, or any kind of professional activities. The data reveals there is large ***proportion of primary sector workers*** compared to secondary and tertiary sectors.
  - About 54.6 per cent of total working population are cultivators and agricultural labourers, whereas only 3.8% of workers are engaged in household industries and 41.6 % are other workers including non-household industries, trade, commerce, construction and repair and other services.
- **Gender Components of Workforce**: As far as the occupation of country's male and female population is concerned, ***male workers out-number female workers in all the three sectors.***
  - The ***number of female workers is relatively high in primary sector***, though in recent years there has been some improvement in work participation of women in secondary and tertiary sectors.
- **Shift from Agriculture to other sectors**: It is important to note that the proportion of workers in agricultural sector in India has shown a decline over the last few decades (58.2% in 2001 to 54.6% in 2011). Consequently, the participation rate in secondary and tertiary sector has registered an increase**.**
  - This indicates a shift of dependence of workers from farm-based occupations to non-farm-based ones, indicating a sectoral shift in the economy of the country.
  - The states like Himachal Pradesh and Nagaland have very large shares of cultivators. On the other hand, states like Bihar, Andhra Pradesh, Chhattisgarh, Odisha, Jharkhand, West Bengal, and Madhya Pradesh have higher proportion of agricultural labourers.
  - The highly urbanized areas like Delhi, Chandigarh and Puducherry have a very large proportion of workers being engaged in other services.
  - This indicates not only availability of limited farming land, but also large-scale urbanisation and industrialization requiring more workers in non-farm sectors.

Categories	Population			
	Persons	% to total Workers	Male	Female
Primary	26,30,22,473	54.6	16,54,47,075	9,75,75,398
Secondary	1,83,36,307	3.8	97,75,635	85,60,672
Tertiary	20,03,84,531	41.6	15,66,43,220	4,37,41,311

4 Demography

- Demography is the systematic study of population. The term is of Greek origin and is composed of the two words, demos (people) and graphein (describe), implying the description of people.

- **Demography studies the trends and processes associated with population including – changes in population size; patterns of births, deaths, and migration; and the structure and composition of the population, such as the relative proportions of women, men, and different age groups**.
- There are different varieties of demography, including formal demography which is a largely quantitative field, and social demography which focuses on the social, economic, or political aspects of populations.

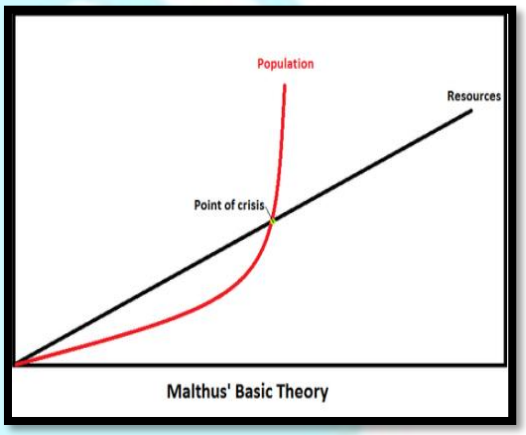
Among the most famous theories of demography is the one associated with the English political economist Thomas Robert Malthus (1766-1834).

4.1 Malthus's theory of population growth

- The Malthusian Theory of Population is the theory of exponential population and arithmetic food supply growth. The theory was proposed by Thomas Robert Malthus. He believed that a balance between population growth and food supply can be established through preventive and positive checks.
- In his **Essay on the Principle of Population (1798)** Malthus argued that because of the strong attraction of the two sexes, the population could increase by multiples, doubling every twenty-five years. He contended that the population would eventually grow so large that food production would be insufficient.

Postulates of the Theory

1. Food is necessary to the life of man and, therefore, exercises a strong check on population. In other words, population is necessarily limited by the means of subsistence (i.e., food).
2. Population increases faster than food production. Whereas population increases in geometric progression, food production increases in arithmetic progression.
3. Population always increases when the means of subsistence increase, unless prevented by some powerful checks.
4. There are two types of checks which can keep population on a level with the means of subsistence. They are the preventive and a positive check.



Assumptions of Malthus

Malthus based his above arguments on man's two basic characteristics essential to the maintenance of life:

1. The need for food, and
2. The passion between sexes.

It was the second which led people to marry at a relatively early age and would result in such a large number of births that the population would double itself in few years if unchecked by misery and vice.

Malthus referred to two classes of checks which kept population down:

1. **Positive means:**
   Positive checks exercise their influence on the growth of population by increasing the death rate. **They are applied by nature**. The positive checks to population are various and include every cause, whether arising from vice or misery, floods, tsunami, etc. which in any degree contributes to shorten the natural duration of human life.
2. **Negative means:**
   Malthus explicitly demanded artificial means of birth control and suggested as an alternative that the birth rate be decreased through preventive measures such as late marriage (postponing marriage until later age), moral restraint, and chastity (abstinence).

Analysis of Malthusian theory

- According to Malthus, preventive checks are always in operation in a civilized society, for positive checks are crude. Malthus appealed to his countrymen to adopt preventive checks in order to avoid vice or misery resulting from the positive checks.
- He contended that without such restraints the world would face widespread hunger, poverty and misery.
- The 'positive' and 'preventive' checks which occur in the human population to prevent excessive growth relate to practices affecting mortality and fertility, respectively.
- Malthus saw the tension between population and resources as a major cause of the misery of much of humanity.
- Malthus argued that positive and preventive checks are inversely related to each other. In other words, where positive checks are very effective, the preventive checks are relatively less effective and vice versa.

Criticism

Malthus's views have been widely challenged on many grounds. The main criticisms about his theory are as under:

1. **The validity of Arithmetic and Geometric ratio**: It is argued that the population has rarely grown in geometrical proportion and means of production have rarely multiplied in arithmetic progression. Population growth is not always in geometric series. Based on the historical data, the population does not get doubled in 25 years.
2. **Overemphasis on Positive check:** Malthus overemphasized the 'positive' checks and did not visualize the role of 'preventive' checks like contraceptives and family planning. **Neo-Malthusists argued for the adoption of birth control within marriage**. Human inventions in the fields of birth control, health and nutrition, and agriculture have helped to a great extent to strike a balance between human reproduction and food supply.
3. **Neglect of technology:** Malthus was also severely criticized for ignoring the role of changing technology and the consequent transformation in the socio-economic set-up of society.
   - He did not fully appreciate the extent to which improved agricultural technology and crop fertilization could sustain a large population.
   - Neo-Malthusians agree that there are absolute limits on food supply, energy, and other resources. Furthermore, they suggest that the problem is intensified by the disproportionate consumption of such resources by so-called developed (industrialized) actions. This formulation has been challenged by other researchers.
4. **Dilution of the core arguments:**
   - Both the positive checks of hunger and disease referred to by Malthus do not operate today, except the terrible disaster sometimes caused by Tsunami, Katrina, Rita, and floods or rains in desert areas like Banner and Jaisalmer in August 2006.
   - But the catastrophe of this nature in any part of the world is immediately rushed to the affected place from surplus areas all over the world. A marked decline in the death rate even in the developing countries is a significant factor in the context of the population spurt.
5. **Pessimistic view:** One of the principal weaknesses of Malthus' thought has been that he neglected the manpower aspect in population growth. He was a pessimist and dreaded every increase in population. He forgot, according to Cannan, that **"a baby comes to the world not only with a mouth and a stomach, but also with a pair of hands."**
   - This implies that an increase in population means an increase in manpower which may tend to increase not only agricultural but also industrial production and thus makes the country rich by an equitable distribution of wealth and income.
   - As rightly pointed out by Seligman "The problem of population is not merely one of mere size but of efficient production and equitable distribution." Thus, the increase in population may be necessary.

6. **False notion of causality Principle**: Moreover, natural calamities referred to above have occurred in under--populated areas also and thus there was no causal relationship between positive checks and overpopulation.
7. **False understanding of biological forces**: Malthus also failed to realize even the biological limitations that a population cannot grow beyond certain limits.
8. **Malthus a False Prophet:** The Malthusian theory is not applicable to countries for which this was propounded. In western European countries, the bogey and pessimism of Malthus have been overcome. His prophecy that misery will stalk these countries if they fail to check the growth of the population through preventive checks has been proved wrong by a decline in birth rate, adequacy of food supply, and increase in agricultural and industrial production. Thus, Malthus has proved to be a false prophet.

Considering the criticisms natural questions arises in one's mind whether Malthusian theory is of any use today? let us discuss this is the subsequent section.

Is Malthusian Theory Valid Today?

- Though the gloomy conclusions of Malthus have not turned out to be true due to several factors which have made their appearance only in recent times, yet the essentials of the theory have not been demolished. He said that unless preventive checks were exercised, positive checks would operate. This is true even today. **The Malthusian theory fully applies in India, discussed below in Box.**
- India at present is in that unenviable position which Malthus feared. We have the highest birth-rate and the highest deathrate in the world. Grinding poverty, ever-recurring epidemics, famine, and communal quarrels are the order of the day. We are deficient in food supply.
- Standard of living is incredibly low in India. Who can say that Malthus was not a true prophet, if not for his country, at any rate for the Asiatic countries like India, Pakistan, and China? No wonder that intense family planning drive is on in India at present, which is discussed later in the document.

Application of Malthusian theory in India

Despite the criticism that the theory has faced since it was introduced, the theory does apply to overpopulated countries. **One such example is India** because of the following reasons

1. In-spite of the Green Revolution India still imports millions of tons of food grains because of food shortage due to population growth.
2. India's population rate is growing at a rate of 1.64% per annum
3. 39% of the population in India lives below the poverty line
4. The life expectancy of an Indian is 70 years which is comparatively lower than other countries
5. The death rate is 11 per 1000 and it shows that natural calamities such as floods, diseases, and hunger are not under full control.

Not only India, in underdeveloped countries of Africa the population is growing at a faster rate than the supply rate of food resulting in deaths by starvation. Thus, the Malthusian theory applies to countries' growth of population rate is more, food production is less, and natural calamities are not kept in check

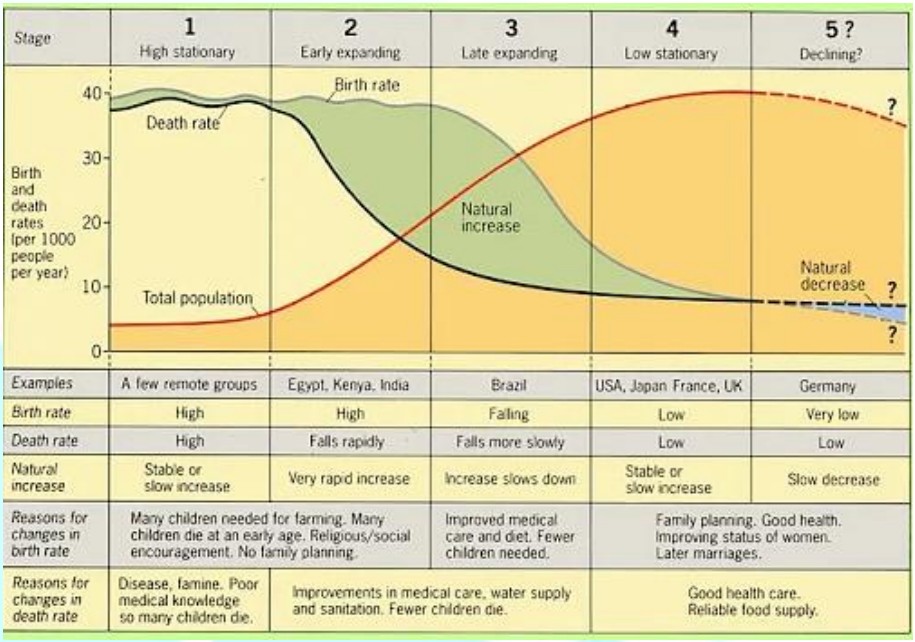
4.2 Neo Malthusian theory

- **The term neo-Malthusianism was first used in 1877 by Dr. Samuel Van Houten**, one of the vice-presidents of the Malthusian League.
- Neo-Malthusianism refers to **the belief that population control through the use of contraception is essential for the survival of the earth's human population.** It rests on the observation that resources are limited, and that growing populations could rapidly outstrip the provision of resources including land and food.
- Today, Neo-Malthusian's advocate **birth control (Preventive Checks) as the most practical means of limiting population growth in contrast to Malthusian belief of positive checks,** where floods, natural catastrophes, epidemics will reduce the population.

The impact of population growth on economic development and other way is crucial for the nation. Let us understand the relationship in brief in the subsequent section.

4.3 Demographic Transition Theory

The demographic transition theory studies the relationship between economic development and population growth. It discusses about changes in birth rate and death rate and consequently growth rate of population in assonance with the process of growth and development. It is also used to describe and predict the future population of any area.



The theory tells us that population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society. These changes occur **in stages** which are collectively known as the demographic cycle.

There are five stages of demographic transition related to the state of economic development:

- **Stage 1**: Less developed countries, high birth rate, high number of deaths due to preventable causes, stable population
- **Stage 2**: Death rates fall due to improved public health but high fertility due to limited access to health and contraceptive services, spurt in population.
- **Stage 3**: Birth rate also falls; population continues to grow due to large number of people in reproductive age group.
- **Stage 4**: Stable population but at a level higher than the initial, low birth & death rates, high social & economic development
- **Stage 5**: Fertility and mortality both decline considerably. The population is either stable or declines slowly.

4.3.1 Criticism

- Although the idea of demographic transition has been extensively praised by demographers, it has also been **severely questioned.**
- Some detractors have even gone so far as to suggest that it cannot be termed a theory.
- **Demographic transition s**tages are not necessarily shown in chronological order.
- Due to the withdrawal of the social security system, former **USSR** nations other than Russia saw rises in mortality rates and entered the first stage of the demographic transition from the second and third stages of the demographic theory.
- First and foremost, this hypothesis is founded only on factual data or the experiences of E**urope, America, and Australia.**
- Second, it is not predictive, and its stages are segmented and unavoidable.
- Third, the importance of man's technological discoveries, particularly in the field of medicine, cannot be overstated in terms of their ability to slow the rate of death.
- Fourth, it neither provides a basic explanation for the process of fertility decrease nor identifies the critical variables involved.

- Fifth, it does not provide a **time range f**or a country to go from one level to the next.
- Finally, it does not bode well for the world's emerging countries, which have lately witnessed exceptional population increase due to a dramatic drop in death rates.
- Despite these critiques and flaws, the demographic transition theory does give an adequate depiction of the world's demographic history at the macro level of generalizations.
- The **transition process** for every nation may be simply understood as an empirical generalization generated from studying the demographic trend in the West.

India at present, is at stage three of the four stage model of demographic transition. Transition from Third stage to fourth stage indicates stable population with high mortality and fertility to stable population with low mortality and fertility, with some of the states/UT's already into stage four.

5 Population Growth and Economic Development

- **Population is very closely linked to the economic development of a society** - The quantity, quality, structure, distribution, and movement of a population can help or hinder the rate of economic development.
- **Scenario of Developed Country** - A developed country with low population density and a low percentage of employable people needs an increase in population in order to keep up with economic development.
- **Scenario of underdeveloped Country** - For an underdeveloped country with high population density and a high percentage of employable people, any increase in population will be detrimental to its economy.
- **Views of Adam Smith**: The consequences of population growth on economic development have attracted the attention of economist ever since Adam Smith wrote in his **"Wealth of Nations".**
  - **Adam Smith wrote, "**The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations."

5.1 Positive aspects of Population Growth on Economic Development

- Increasing population would add to an increase in working population and active participants in the process of economic growth and development.
- Growing population results in growing market which further leads to increase in utilization of goods and services.
- Business activity would be spurred because of the above and as a consequence, more income and employment will be created in the process.

5.2 Negative aspects of Population Growth on Economic Development

- If the rate of growth of population exceeds the rate of production, economic development is hampered.
- Society with limited stock of capital- labour to be substituted for capital-Production function exhibit the law of diminishing returns.
- (Coale-Hoover thesis) adverse effects of population growth on savings and capital formation through the following effects (**especially in Indian context)**
  - Age-dependency effect*
  - Capital- shallowing effect**
  - Investment diversion effect***

* Age dependency Ratio

- The age dependency ratio expresses the relationship between three age groups within a population: ages 0-15, 16-64 and 65-plus. **Higher values indicate a greater level of age-related dependency in the population.**

- As per the definition used by the U.S. Bureau of Labor Statistics, the **"dependent population"** is defined as people ages 0-15 and 65-plus, while the **"working age population"** is defined as people between ages 16 and 64.

** **Capital-shallowing effect**

- **If capital input grows slower than the growth in labour input**, then the amount of capital per worker declines. This is known as **capital shallowing**.
- On the other hand, economists use the term **capital deepening** to describe an increase in the amount of capital per worker in the economy.

*** **Investment Diversion effect**

- The concept of the investment diversion is originated by Kindleberger (1966). It defines the investment diversion effect **as increased direct investment in certain countries and diminished direct investment in others within the region** as rearrangement of the production facilities.
- The effect is observed in Indian context because of trade agreements. Few years back, India backed out of Regional Comprehensive Economic Partnership (RCEP), losing large share of investment and profits.

6 Population Policy of India

- **Introduction**: The status of the economy determines the appropriate level of population. Population policy must be developed according to the following guidelines:
  - It must be based on the society's economic development.
    - Since economy and population are closely related, they must both be worked on at the same time; and
    - Both the quantity and quality of life of the population must also be worked on at the same time.
  - Dealing with the relationship between population and the economic development of a society properly can bring about rapid improvement in the economic development and standard of living of that society.

6.1 Evolution of India's Population Policies

Even before independence, attempts were made to come up with recommendations and solutions to India's burgeoning population problem. The efforts both pre- and post-independence are mentioned below:

- **Radha Kamal Mukherjee Committee (1940):** In 1940, the Indian National Congress appointed a committee headed by a social scientist Radha Kamal Mukherjee to suggest solutions to arrest the population which has started increasing rapidly after 1921. The committee recommended self-control, generating awareness of cheap and safe birth control measures, discouraging polygamy, among others, as measures to bring down the rate of population growth.
- **Bhore Committee**: The Health Survey and Development committee under Sir Joseph Bhore recommended 'deliberate limitation of family' as a measure to control the population growth. This committee was set up in 1943 and submitted its report in 1946.
- India became one of the first developing countries to come up with a **state-sponsored family planning programme** in the 1950s.
- A population policy committee was established in 1952. However, the policies framed in the early fifties were largely arbitrary and so unsuccessful.
- **In 1956,** a **Central Family Planning Board** was set up and its focus was on sterilisation.
- **In 1976, GOI announced the first National Population Policy**. Some of the measures to check the population growth as part of this policy include:
  - Increased the minimum legal marriageable age for boys and girls to 21 and 18 respectively.
  - Providing monetary incentives for employing birth control.
  - Improving women's literacy levels through formal and informal channels.
  - Population was made a criterion in deciding the quantum of central assistance to states.

- Using the different forms of media to popularise family welfare programmes.
- Introducing population education into the formal education system.

- **In 1977, after the Emergency ended**, the new government discarded the use of force in family planning *and the family planning programme was renamed as the family welfare programme*.
- The National Health Policy was adopted in 1983 which emphasised **'securing the small family norm through voluntary efforts and moving towards the goal of population stabilization'.**
- **A Committee on Population was appointed in 1991** which submitted its report in 1993 in which it recommended the formulation of a National Population Policy to take 'a long-term holistic view of development, population growth, and environmental protection' and to 'suggest policies and guidelines [for] formulation of programmes' and 'a monitoring mechanism with short- medium- and long-term perspectives and goals'.
- Accordingly, an Expert Group headed by Dr. MS Swaminathan was set up to create the draft national population policy.
- The National Population Policy finally came into force in 2000, which is discussed below:

6.2 The National Population Policy, 2000 (NPP 2000)

- **The National Population Policy, 2000** *affirms the commitment of government towards voluntary and informed choice and consent of citizens while availing reproductive health care services, and continuation of the target free approach in administering family planning services.*
- The NPP 2000 provides a policy framework for advancing goals and prioritizing strategies during the next decade, to meet the reproductive and child health needs of the people of India, and to achieve net replacement levels (TFR) by 2010.
- **The immediate objective of the NPP 2000** is to address the unmet needs for contraception, health care infrastructure, and health personnel, and to provide integrated service delivery for basic reproductive and child health care.
- **The medium-term objective** is to bring the TFR (Total Fertility level) to replacement levels by 2010, through vigorous implementation of inter-sectoral operational strategies.
- **The long-term objective** is to achieve a stable population by 2045, at a level consistent with the requirements of sustainable economic growth, social development, and environmental protection.

Result

- The National Family Planning Programme of the Ministry of Health & Family Welfare is guided by the tenets of the National Population Policy 2000 and oversees its implementation.
- Under this program the service delivery data is triangulated and further the program is regularly reviewed through annual review meetings, supportive supervision visits, common review missions etc.
- **As a result of the Government's efforts, the successes achieved are enumerated below:**
  - The Total Fertility Rate (TFR) has declined **from 2.9 in 2005 to 2.0 in 2021** [as per National Family Health Survey (NFHS 2019-21) data]
  - There are only five States in India, which are above replacement level of fertility of 2.1. They are Bihar (2.98), Meghalaya (2.91), Uttar Pradesh (2.35), Jharkhand (2.26) Manipur (2.17).
  - The **decadal growth rate** has **declined** from 21.54% in 1999-2000 to 17.64 % during 2001-11.

Note: Kindly refer to latest Schemes and Reports for the Census details of India and other latest information regarding the population trends of India.

7 Important Issues

7.1 Demographic Dividend

7.1.1 Demographic Dividend: Definition

Demographic dividend refers to the **growth in an economy that is the result of a change in the age structure of a country's population**. The change in age structure is typically brought on by a decline in fertility and mortality rates.

- **The demographic advantage or 'dividend'** to be derived from the age structure of the population is due to the fact that India is (and will remain for some time) one of the youngest countries in the world. A third of India's population was below 15 years of age in 2000.

- **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)".

7.1.2 Demographic Dividend in India

- India has 62.5% of its population in the age group of 15-59 years which is ever increasing and will be at the peak around 2036 when it will reach approximately 65%.
- These population parameters indicate an availability of demographic dividend in India, which started in 2005-06 and will last till 2055-56.
- **According to Economic Survey 2018-19**, India's Demographic Dividend will peak around 2041, when the share of working-age, i.e., 20-59 years, the population is expected to hit 59%.
- **India- Youngest population in the World:** India has one of the youngest populations in an aging world. By 2020, the median age in India will be just 28, compared to 37 in China and the US, 45 in Western Europe, and 49 in Japan.
- **Bulge in Working - age Population**: Since 2018, India's working-age population (people between 15 and 64 years of age) has grown larger than the dependent population — children aged 14 or below as well as people above 65 years of age.
  - This bulge in the working-age population is going to last till 2055, or 37 years from its beginning. This transition happens largely because of a decrease in the total fertility rate (TFR, which is the number of births per woman) after the increase in life expectancy gets stabilised.
- **A study on demographic dividend in India by United Nations Population Fund (UNFPA)** throws up two interesting facts.
  - The window of demographic dividend opportunity in India is available for five decades from 2005-06 to 2055-56, longer than any other country in the world.
  - This demographic dividend window is available at different times in different states because of differential behaviour of the population parameters.

7.1.3 Advantages Associated with Demographic Dividend

- **Better economic growth –** Better economic growth brought about by increased economic activities due to higher working age population and lower dependent population. It will be channelized in following ways:
  - Increased Labour Force that enhances the productivity of the economy.
  - Increased fiscal space created by the demographic dividend to divert resources from spending on children to investing in physical and human infrastructure.
  - Rise in women's workforce that naturally accompanies a decline in fertility, and which can be a new source of growth.
  - Increase in savings rate, as the working age also happens to be the prime period for saving.
  - A massive shift towards a middle-class society, that is, the rise of aspirational class.
  - Rapid industrialisation and urbanisation because of higher number of employment seeking population that would force higher economic activities.

- **Empirical Evidence** - Demographic dividend has historically contributed up to 15 % of the overall growth in advanced economies.
  - Japan was among the first major economies to experience rapid growth because of changing population structure.
  - The country's demographic-dividend phase lasted from 1964 to 2004.
- **Rise in workforce -** With more than 65% of working-age population, India will rise as an economic superpower, supplying more than half of Asia's potential workforce over the coming decades.
- **Effective policy making** - Fine-tuning the planning and implementation of schemes and programmes by factoring in population dynamics is likely to yield greater socio-economic impact and larger benefits for people.

7.1.4 Challenges Associated with Demographic Dividend

- **Asymmetric demography -** The growth in the working-age ratio is likely to be concentrated in some of India's poorest states and the demographic dividend will be fully realized only if India is able to create gainful employment opportunities for this working-age population.
- **Lack of skills -** Most of the new jobs that will be created in the future will be highly skilled and lack of skill in Indian workforce is a major challenge. India may not be able to take advantage of the opportunities, due to a low human capital base and lack of skills.
- **Low human development parameters -** India ranks 132 out of 191 countries in UNDP's Human Development Index 2021-22 report, which is alarming. Therefore, health and education parameters need to be improved substantially to make the Indian workforce efficient and skilled.
- **Informal nature of economy** - It is another hurdle in reaping the benefits of demographic transition in India.
- **Jobless growth -** There is mounting concern that future growth could turn out to be jobless due to de-industrialization, de-globalization, the fourth industrial revolution, and technological progress. As per the NSSO Periodic Labour Force Survey 2021-22, India's labour force participation rate for the age-group 15-59 years is around 47%, that is, around half of the working-age population is jobless.
- **Low participation of women in the workforce -** Cultural and social factors, as well as inadequate support structures like childcare facilities, contribute to women's underrepresentation in the labor market. Increasing female workforce participation is crucial for fully realizing the demographic dividend. According to the PLFS, we have approximately **166 million women either working, seeking work, or available for work.** Out of the population of working women, **more than 90 percent work in the informal sector**.

7.1.5 What needs to be done?

- **Building human capital -** Investing in people through **healthcare, quality education, jobs and skills helps build human capital**, which is key to supporting economic growth, ending extreme poverty, and creating a more inclusive society.
  - **Skill development** to increase employability of young population. India's labour force needs to be empowered with the right skills for the modern economy. Government has established the **National Skill Development Corporation** (NSDC) with the overall target of skilling/ upskilling 500 million people in India by 2022.
  - **Education -** Enhancing educational levels by properly investing in primary, secondary and higher education. India, which has almost 41% of population below the age of 20 years, can reap the demographic dividend only with a better education system. Also, academia-industry collaboration is necessary to synchronise modern industry demands and learning levels in academics.
    - Establishment of **Higher Education Finance Agency** (HEFA) is a welcome step in this direction.

- **Health -** Improvement in healthcare infrastructure would ensure higher number of productive days for young labour force, thus increasing the productivity of the economy.
  - Success of schemes like Ayushman Bharat and National Health Protection Scheme (NHPS) is necessary. Also, the nutrition level in women and children needs special care with effective implementation of the Integrated Child Development (ICDS) programme.
- **Job Creation -** The nation needs to create ten million jobs per year to absorb the addition of young people into the workforce. Promoting businesses' interests and entrepreneurship would help in job creation to provide employment to the large labour force.
  - India's improved ranking in the World Bank's Ease of Doing Business Index is a good sign.
  - Schemes like Start-up India and Make in India, if implemented properly, would bring the desired result in the near future.

- **Urbanization -** The large young and working population in the years to come will migrate to urban areas within their own and other States, leading to rapid and large-scale increase in urban population. How these migrating people can have access to basic amenities, health and social services in urban areas need to be the focus of urban policy planning.
  - Schemes such as **Smart City Mission** and **AMRUT** needs to be effectively and carefully implemented.

Higher Education Finance Agency (HEFA)

- HEFA **incorporated on 31st May 2017,** is **a joint venture of Ministry of HRD, GOI and Canara Bank** with an **agreed equity participation in the ratio of 90.91% and 09.09% respectively.**
- HEFA is registered under **the Companies Act 2013** as a Union Govt company and as **Non–deposit taking NBFC** with RBI.

VISION: To enable India's premier educational institutions to excel and reach the top in global rankings by financing building world class infrastructure including R&D Infra.

Functions:

- It will **mobilize resources from the market by way of equity from individuals / corporates and by issue of bonds** to finance the requirement.
- It provides **financial assistance** for creation of educational infrastructure and R&D in India's premier educational Institutions.
- Encourages **scientific and technological developments by supporting R&D facilities** for conducting high-quality research.
- **Channelises CSR contributions** from companies and donations for various schemes in uplifting higher education.

How HEFA works? What are the advantages?

The **funding under HEFA will replace the current grant assistance by GOI** for infrastructure projects in premier educational institutions.

All the Educational Institutions set up/funded referred by concerned ministries would be eligible for financing their capital expenditure from HEFA.

- HEFA would be able to fund larger basket of institutions as compared to grants approach.
- Top class infrastructure can be created in quick time so that the country realises the potential of its demographic dividend in a faster time frame.

7.1.6 Way Forward

India is on the right side of a demographic transition that provides a golden opportunity for its rapid socio-economic development if policymakers align the developmental policies with this demographic shift. To reap the demographic dividend, proper investment in human capital is needed by focusing on education, skill development, and healthcare facilities. This demographic transition also brings complex challenges with it. If the increased workforce is not sufficiently skilled, educated, and provided gainful

employment, we would be facing demographic disaster instead. By learning from global approaches from countries such as Japan and Korea and designing solutions considering the domestic complexities, we would be able to reap the benefits of a demographic dividend.

7.2 Skewed Gender Ratio

As per the Sample Registration System (SRS) Statistical Report 2020 released by **Registrar General of India (RGI),** the country has been witnessing a progressive reduction in IMR (Infant Mortality rate), U5MR (Under 5 mortality Rate), and NMR (Neonatal Mortality Rate) since 2014 towards achieving the Sustainable Development Goals (SDG) targets by 2030**.** This clearly marks the success of government measures to bring population control.

However, on the flip side, the SRS report highlights the sex ratio at birth in India is poor at 904. **The United Nations Population Fund (UNFPA) State of World Population 2020** held that the sex ratio at birth in India is lower than all the countries in the world except China.

Therefore, along with the stabling of the population, the government and society need to address the poor sex ratio and subsequently gender discrimination.

7.2.1 Reasons for Skewed Sex Ratio

- **Gender Bias:** According to information from the UNFPA, reasons for female infanticide include anti-female bias, as women are often seen as subservient to men, who often employ positions of power.
- **Son-Preference:** Parents believe they will be better taken care of in their old age by men, as men are perceived as the principal wage earners of the family. Hence, they prefer a son.
- **Social Evil-Dowry:** Families with daughters are typically expected to pay dowry, a financial burden that can be avoided by having sons.
- **Counter Effect of Rise in Income:** Contrary to popular perception, India's sex ratio at birth declined even as per capita income increased nearly 10 times over the last 65 years, according to an India Spend analysis of government data.
  - This could be because of rising income, which results in increased literacy, and makes it easier for families to access sex-selective procedures.

7.2.2 Issues Related to Lower Sex Ratio at Birth

- **Gender-imbalance:** Prof. Amartya Kumar Sen, in his world-famous article **"Missing Women"** has statistically proved that during the last century, 100 million women have been missing in South Asia.
  - This is due to discrimination leading to death, experienced by them from womb to tomb in their life cycles.
  - An adverse child sex ratio is also reflected in the distorted gender makeup of the entire population.
  - According to World Bank, in 2031, India will have 936 females per 1,000 males, lower than the sex ratio in 1951 of 946 females per 1,000 males.
- **Distortion in the Marriage System:** Adverse ratio results in a gross imbalance in the number of men and women and its inevitable impact on marriage systems as well as other harms to women.
  - In India, some villages in Haryana and Punjab have such poor sex ratios that men "import" brides from other states. This is often accompanied by the exploitation of these brides.
  - There are concerns that skewed sex ratios lead to more violence against both men and women, as well as human trafficking.

7.2.3 Challenges Involved

- **Regressive Mindset**: There is considerable son preference in all states, except possibly in Kerala and Chhattisgarh. This son's preference is derived from a regressive mindset. E.g.: People associate girls with dowry.
- **Misuse of Technology**: Cheaper technology like ultrasound helps in sex selection.

- **Failure in Implementation of Law**: The **Prenatal Conception and Prenatal Determination Act** (PC-PNDT), 1994 which punishes healthcare professionals for telling expectant parents the sex of a child with imprisonment and hefty fines, has failed to control the sex selection.
  - Reports found major gaps in the training of personnel implementing PC-PNDT. Poor training meant that they were unable to prepare strong cases against violators to secure convictions.
- **Illiteracy**: Illiterate women in the reproductive age group of 15-49 years have higher fertility than literate women.

7.2.4 Way Forward

- **Bringing Behavioral Change**: Increasing female education and economic prosperity helps to improve the ratio. In this pursuit, the government's **Beti-Bachao Beti-Padhao** Campaign has achieved remarkable success in bringing behavioral change in the society.
- **Sensitizing Youth**: There is an urgent need to reach young people for reproductive health education and services as well as to cultivate gender equity norms.
  - Regarding the above target, the services of **Accredited Social Health Activists** (ASHA) can be leveraged, especially in rural areas.
- **Stringent Enforcement of Law**: India must implement the **Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994** more stringently and dedicate more resources to fighting the preference for boys.
  - In this context, **the Drugs Technical Advisory Board** decision to include ultrasound machines in the **Drugs and Cosmetics Act** is a step in the right direction.

Although India has created several impressive goals to reduce its population growth rates, India and the rest of the world have a long way to go to achieve meaningful population policy which are not only based on quantitative control but qualitative control as well.

About Drugs Technical Advisory Board:
- It is the highest statutory decision-making body on technical matters related to drugs in India.
- It is established as per **the Drugs and Cosmetics Act, 1940.**
- It is part of the Central Drugs Standard Control Organization (CDSCO).
- **Nodal Ministry:** Ministry of Health and Family Welfare.

Function: It advises the **Central Government and the State Governments** on **technical matters** arising out of the administration of the Drugs and Cosmetics Act, of 1940 and to carry out the other functions assigned to it by this Act.