

Demographic Features of India

Vinil K V

Dept. of Economics, Sacred Heart College, Thevara

Theory of Demographic Transition

According to the theory of demographic transition, every country passes through three stages of population growth.

Three Stages

Stage 1: High birth rate and high death rate

Stage 2: High birth rate and low death rate

Stage 3: Low birth rate and low death rate

The First Stage

High Birth Rate and High Death Rate

- In the first stage, both birth and death rates are high.
- Population remains more or less stable.
- Agriculture is the main occupation of the people, per capita income is low.
- This results in a low standard of living, inadequate and unbalanced diet, poor housing conditions, absence of opportunities for education and limited medical facilities.

The Second Stage

High Birth Rate and Low Death Rate

- The second stage is characterized by rapid growth of population
- Substantial reduction in the mortality rate without corresponding decline in the birth rate.
- The living standards of the people improve, education expands, medical and health facilities increase and governments make special efforts to check various epidemics and diseases.
- These developments result in reduction in death rate. However, the society remains primarily agrarian and the birth rates remain high. Population increases at an alarming rate.

The Third Stage

Low Birth Rate and Low Death Rate

- In the third stage the birth rate declines significantly and thus the rate of population growth remains low.
- Industrialisation and education reinforces peoples desire to have smaller families.
- When the process of economic development gets accelerated women seek all kinds of employment and this also brings down the fertility rate.
- Once this happens, the population problem would be solved.
- The characteristics off the third stage are low birth rate, low death rate,small family size and low growth rate of population.

Introduction

India today possesses about 2.4 percent of the total land area of the world but houses 17.64% of the world population. It is essential to study about the rate of growth of population of India in the 20th century. This could be done in four phases:

Phases of Population Growth of India

1901-1921: Stagnant Population

1921-1951: Steady growth

1951-1981: Rapid High Growth

1981-2011: High growth with definite signs of slowing down

1901-1921: Stagnant Population

- During the first phase the population of India grew from 236 million to 251mn. The compound annual growth rate was negligible.
- The growth of population was held in check by the prevalence of a high death rate against a high birth rate.
- India was in the first stage of demographic transition in this period marked by stagnant population growth.

1921-1951: Steady growth

- During the second phase, the population of India grew from 251 mn to 361mn.
- The main reason for the increase in population growth rate was a decline in death rate.
- The fall in death rate was largely due to the control of widespread epidemics like plague, small pox, cholera etc.
- India had started its entry into the second phase of demographic transition during this period which marked a steady but low growth rate of population.

1951-1981: Rapid High Growth

- During the Third phase, the population of India grew from 361 mn to 683mn.
- There was a record rate of growth population explosion.
- With the advent of planning, extension of hospitals and medical facilities undertaken on a big scale

1981-2011: High growth with definite signs of slowing down

- During this period India entered the phase of high population growth with definite signs of slowing down.

Census Data on Population

Year	Populatoin (in mn)	% change	CBR	CDR	Sex ratio
1901	236	0	45.8	44.4	972
1911	252	5.7	48.1	42.6	964
1921	251	-0.3	49.2	48.6	955
1931	279	11	46.4	36.3	950
1941	319	14.2	45.2	31.2	945
1951	361	13.3	39.9	27.4	946
1961	439	21.5	40	18	941
1971	548	24.8	41.2	19	930
1981	683	24.7	37.2	15	934
1991	844	23.5	32.6	11.1	927
2001	1027	21.3	22.8	7.4	933
2011	1210	17.64	22	7.2	943

Total Fertility Rate

Year	TFR	Annual Population Growth	Population
2001	3.1	1.77	1027
2011	2.4	1.12	1210.6
2016	2.3	0.72	1286.1

Source: World Bank Data

Birth Rate

Crude Birth Rate

The crude birth rate is the number of live births occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.

Fertility depends on

- ① age at which females marry,
- ② duration of the period of fertile union and
- ③ the rapidity with which they build their families.

Birth Rate in India

- In India the mean age at marriage has been low as compared to other countries of the world.
- It has improved over the years. The mean age at marriage for females was 13.7 in 1921, it improved to 15.8 in 1961 and 18.3 in 2001.
- The total fertility rate (TFR) has declined from 5.4 in 1988 to 3.1 in 2001, 2.4 in 2011 and 2.3 in 2016
- Fertility has strong correlation with the educational level of the mother.
- It has always remained higher in rural areas than urban areas.
- In addition there is a positive correlation between population growth rate and the child population in the age group 0-6.

Causes of high birth rate

The major factors behind high birth rate in India could be broadly classified into Economic factors and Social factors.

Economic Factors influencing Birth Rate

- 1) predominance of agriculture,
- 2) slow urbanization process and predominance of villages, and
- 3) poverty.

Social factors

- 1) near universality of marriage,
- 2) lower age at the time of marriage,
- 3) religious and social superstitions,
- 4) joint family system, and
- 5) lack of education.

Table: Birth rate and Death rate

Year	GDP	CBR	CDR	MMR	TFR
2009	7.9	22	7.6	47.4	2.7
2010	8.5	21.4	7.5	45.3	2.6
2011	5.2	20.9	7.5	43.2	2.5
2012	5.5	20.4	7.4	41.1	2.5
2013	6.4	19.9	7.4	39.1	2.4
2014	7.4	19.6	7.3	37.2	2.4
2015	8	19.3	7.3	35.3	2.4
2016	8.2	19.0	7.3	33.6	2.3
2017	7.2	18.8	7.3	32.0	2.3
2018	6.9				

Source: World Bank, 2019

Death Rate

Crude Death Rate

The crude death rate is the number of deaths occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.

- Over the years CDR has fallen significantly.
- This was due to better diet, pure drinking water, improved hospital facilities, better sanitation and control of several epidemics and diseases.
- Infant mortality rates have also fallen significantly. The IMR which stood at 218 per thousand in 1920 had come down to 63 in 2003.
- The principal causes of IMR are: malnutrition, pneumonia, diarrhea, infectious and parasitic diseases.

Causes of decline in the mortality rate

The major reasons for the decline in mortality rates are:

- ① elimination of famines,
- ② control of epidemics and decline in the incidence of malaria and tuberculosis, and
- ③ other factors such as improvement in the supplies of pure drinking water, sanitation and hygiene, spread of education and expanded medical facilities particularly immunization against various preventable diseases.

Sex Ratio

Sex Ratio

Sex ratio is defined as the number of females per thousand males.

- It is an important and useful indicator to assess relative excess of deficit of men or women in a given population at that point of time.
- The overall trend of sex ratio in the country since 1901 shows a continuous trend towards a decline in sex ratio.
- Kerala alone shows a higher proportion of females (1084).
- In India, 108 females are born per 100 males, but the loss of more females due to insufficient attention and care to them after birth, a relatively higher proportion of deaths among females at the time of puberty due to functional derangement and high death rate among women in the reproductive age bracket 11-19 on account of early marriage disfavor them.

Age Composition

- The study of age composition, helps us in determining the proportion of the labour force in the total population.
- The working age of the population is considered as 15-60. Those up to 14 years of age are considered are children while those above 60 are considered as aged population.
- Both children and aged population are considered to be dependent population.
- The principal reason for a higher child population in India was the high birth rate.
- The recent decline in infant mortality has also added to our child population.

Age Composition of the Population of India

Table: Age Composition of the Population of India

Year	0-14	15-60	60 and above
1911	38.8	60.2	1
1921	39.2	59.6	1.2
1931	38.3	60.2	1.5
1961	41	53.3	5.7
1971	41.4	53.4	5.2
1981	39.7	54.1	6.2
1991	36.5	57.1	6.4
2001	35.6	58.2	6.3
2011	29.9	61	9

Source: Census Data

Population dividend (demographic dividend)

Traditionally, the population growth of the country has been considered as a liability on the natural resources, but looked at from another point of view, population becomes an asset. There is a structural change expected in the population.

Demographic Dividend

The demographic dividend is the accelerated economic growth that may result from a decline in a countrys mortality and fertility and subsequent change in the age structure of the population.

The capacity to harness the growing working age population in productive activities.

There is a strong need to develop new skills.

Rural Urban migrations

- Economics development is generally associated with the growth of urbanisation.
- The 2011 census data shows that the proportion of urban population of India is 31.16% compared to 27.79 in 2001 and 23.34% in 1981. This was only 17.29% in 1951.
- Presently India's urban population is larger than the urban population of all countries except China.

Occupational distribution

- Rising population is accompanied by a rise in the labour force of the community.
- Hence it makes the solution of the problem of unemployment more difficult.
- According to 1981 census, the work participation rate in India was 36.7 percent. In 1991, it increased to 37.7%. According to 2001 census, the work participation rate increased to 39.2 percent. In 2011-12 it became 39.5.

Occupational Distribution in India

Table: Occupational distribution in India

Sectors	1901	1951	1961	1971	1981	1991	1999-2000	20
Primary	71.7	72.1	71.8	72.2	68.8	66.8	56.7	
Secondary	12.6	10.7	12.2	11.2	13.5	12.7	17.5	
Services	15.7	17.2	16	16.7	17.7	20.5	25.8	

Source: NSSO Date

Problems of Over Population

The major problems of over population are

- 1) Population growth and the declining land-man ratio; the density of population would increase,
- 2) It adversely affects capital formation
- 3) other factors such as i) increases unemployment in the economy, ii) reduces the per capita income and standard of living, iii) food scarcity, iv) import of foodgrains, v) it prevents the change in occupational distribution of the population.

On the other hand, some economists state that population growth is not the problem but other issues.

It is infact desirable for many developing regions of the world.

Population policy

The alarming rate of growth of population in the country calls for a positive population policy to control this growth of population.

Family planning programmes.

India is recognized as the first country in the world to officially adopt family planning programme in 1952. Family planning programmes, use three methods; 1) sterilization, 2) IUD insertion, and 3) regular use of pills.

Non family planning measures

The major non family planning measures are increasing the mean age of marriage, universality of education, women empowerment, having more awareness programmes etc.

National Population Policy 2000

The Govt. of India decided to adopt a national population policy on 15th February, 2000 with a view to encourage two child norm. The policy has outlined immediate, medium term and long term objectives.

Objectives of Population Policy

- 1 The immediate objective was to meet needs of contraception, health infrastuctrure, health personnel and to provide integrated service for basic reproductive and child health care.
- 2 The medium term objective is to lower down the total fertility rates to the replacement level by 2010.
- 3 The log-term objective is to achieve a stable population by 2045

Line of Action

1. To address the unmet needs for basic reproduction (contraception), child health services, supplies and infrastructure (health personnel).
2. To make school education up to age 14 free and compulsory and reduce dropouts at primary and secondary school levels to below 20 per cent for both boys and girls.
3. To reduce infant mortality rate to below 30 per 1,000 live births.
4. To reduce maternal mortality rate to below 100 per 100,000 live births.
5. To achieve universal immunization of children against all vaccine preventable diseases.
6. To promote delayed marriages for girls, not earlier than age 18 and preferably after 20 years of age.

Line of Action

7. To achieve universal access to information/counseling, and services for fertility regulation and contraception with a wide basket of choices.
8. To achieve 80 per cent institutional deliveries and 100 per cent deliveries by trained persons.
9. To achieve 100 per cent registration of births, deaths, marriages and pregnancies.
10. To prevent and control communicable diseases, especially AIDS and sexually transmitted infections (STIs).
11. To promote vigorously the small family norm.
12. To integrate Indian Systems of Medicine (ISM) in the provision of reproductive and child health services, and in reaching out to households.

The Gender related Development Index (GDI)

- The gender related development index (GDI) was introduced in Human Development Report in 1995.
- GDI attempts to capture achievements in the HDI life expectancy, educational attainment and income- but adjust the HDI for gender inequality.
- India ranks 134 among 182 countries and is classified as a medium HDI country. Between 1980 and 2007, Indias HDI increased by about 1.3% every year. Most high income countries show growth rates between 0.25 to 0.5% per year over this period.
- The ranking clearly showed India has slipped in comparative terms in ensuring a better quality of life for its citizens as in the previous index, compiled together for 2007 and 2008, it ranked 128, while the position the year before was 126

Gender empowerment measure (GEM)

Gender empowerment measure (GEM) as well was introduced in 1995. It indicates whether women are able to actively participate in economic and political life. It focuses on participation, measuring gender inequality in key areas of economic and political participation in basic capabilities.

Table: GEM Scores for India, 2006 and 1996

Year	PI	EI	PoERI	GEM
2006	0.625	0.546	0.319	0.497
1996	0.573	0.443	0.231	0.416

PI = Index of Political Participation and Decision-making Power; EI = Index of Economic Participation and Decision-making Power; PoERI = Index of Power over Economic Resources; and GEM = Gender Empowerment Measure