



## POPULATION GROWTH AND ECONOMIC DEVELOPMENT IN INDIA

**Priya Nandi**

Teaching Assistant and Research Scholar, Dept. of Economics  
Vinoba Bhave University, Hazaribag

*India is a developing country and India's population is large and growing fast. Many economists co-related population growth and economic development and they find that there is an inverse relationship between population growth and economic development. The main aim to this work is to find the effect of rapid population growth on economic development in India. This is very important because India is second most populated country in the world and many studies show that India will overtake China soon. In this study, four parameters have been taken i.e. GDP growth rate, National Income, Per Capita Income and Unemployment Rate; and the effect of population growth on economic development will measure. Thus, we may conclude that in India, a rising population hampers economic growth. For a country like India, the immediate problem is to provide job to existing unemployed persons as well as another problem is the high rate of population growth is responsible for slow growth on national income. Hence, government needs to make some policies to control rapid population growth and there is also need for India to engage the high economic active group in productive activities.*

### INTRODUCTION

Population growth and economic development is a disputed topic on the world. Population growth means an increase in the population of a particular country. Population increases of any particular country then when the fertility rates more than the mortality rate of that country. Its means that more people are born in the country and making the population goes up. Population growth plays an important role in the development process of a country. In India, population growth is a big issue or an obstacle for economic development. According to 'United Nations Department of Economics and Social Affairs: Population Division', in June 2018, the current population of India is 1,360,557,250. Where, current male population is 702,491,630 (51.6%) and current female population is 658,065,620 (48.4%). The population growth this year is 7,177,606. During 2018 Indian population is projected to increase by 17,034,447 people and reach 1,370,048,541 in the beginning of 2019.

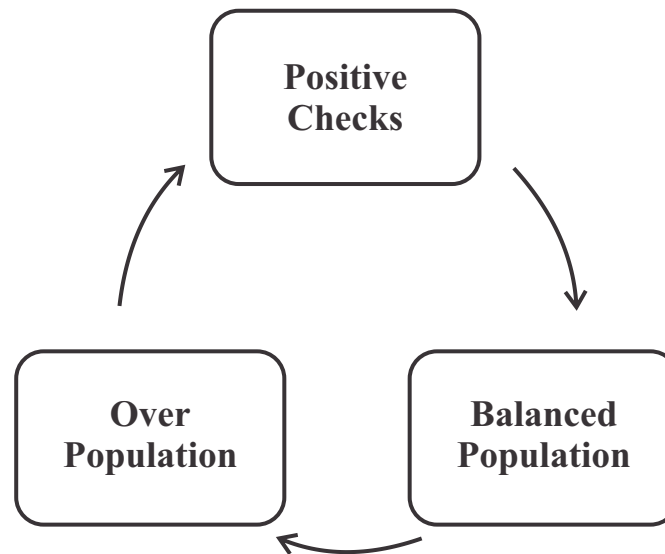
### THEORIES OF POPULATION GROWTH

Many economists started analyses on the relations between population growth and economic development after contribution of Malthus. Malthus proposed his theory in the book "Essay on the Principle of Population". Malthus had seen the contradiction as fundamentally a contradiction between population increase and fundamentally contradiction population increases and the increases in food supply. The 'pressure' arose because of the assumed uneven rate of growth of population and food supply. According to Malthus the population will grow in geometrical progression, that is, in the order of 1,2,4,8,16,32,etc. while the food supply will increases in an arithmetical progression, that is, in the order 1,2,3,4,5,6,etc. Thus a time will come when the population will multiply much faster than the means available for subsistence. Malthusian theory goes in as following:

- Population increases by geometrically
- Food supply increases by arithmetically
- The new population will not get sufficient amount of food

- Some adverse event like positive checks cause decline in the population. Then this leads to food supply and population coming down back to the equilibrium.

**Figure-1 : Malthusian Cycle of Population**

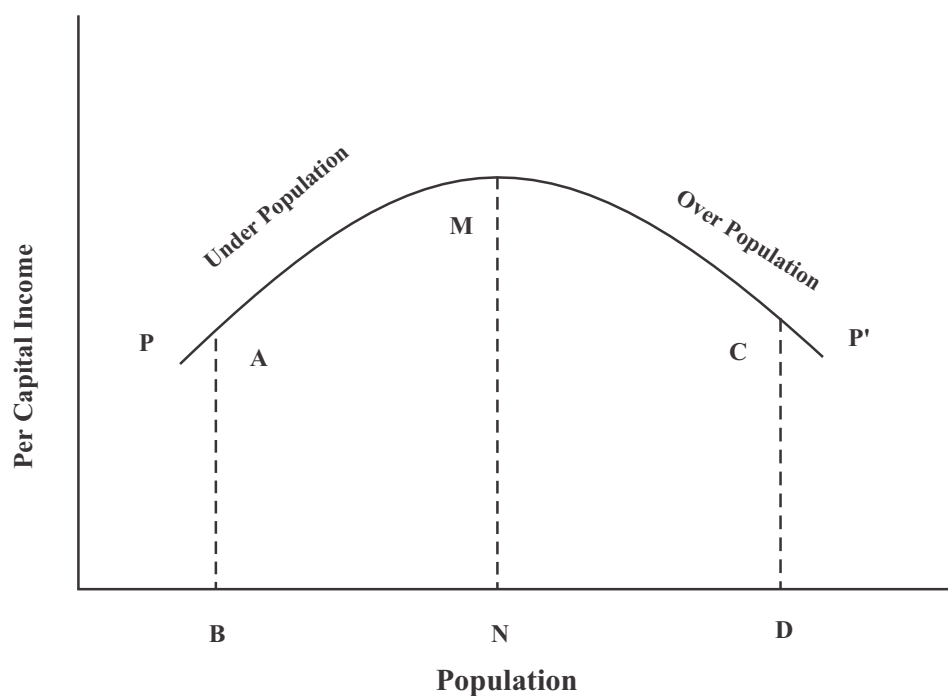


Malthusian population trap is the main example for the theories which support negative impact on economic development and population growth. After Malthus, Edwin Cannan propounded the optimum theory of population in his book "Wealth" published in 1924. But it was popularized by Robbins, Dalton and Carr-Saunders. In Cannan theory, he discuss about the optimum population is that ideal size of population which provide maximum income per head. Any rise or fall in the size of population above or below the optimum level will diminish income per head. Given the stock of natural resources the technique of production and the stock of capital in a country, there is a definite size of population corresponding to the highest per capita income. Cannon's optimum theory of population goes in following -:

- **Optimum Population:** Optimum population is that ideal size of population which provides the maximum income per head. Other things being equal any deviation from the optimum - sized population will affect the per capita income. Optimum population said to be achieve when the no. of people working will all the equitable resources produces the highest capital economic return. Resulting in the highest standard of living and the quality of live.
- **Under Population:** This accordance is set to happen when there are far more resources in an area that is more food production, more energy and mineral etc. can be done by the people living their country is under populated and increase population will increase the per capita income. Population should increase till it reaches optimum level.
- **Over population:** The condition of over population is set to occur when there are too many

people relative to the resources and technology available in an area to maintain an adequate standard of living. Increase in population is followed by decline in per capita income, country is over populated and population need to be reduce till it reaches optimum level.

**Figure-2 : Malthusian Population Trap**



Hence, Cannan supported an optimum level of population to increase per capita income. Over population or under population can't reach maximum per capita income level. Hence, it is an obstacle for economic growth.

### **OBJECTIVES**

1. To analyse the impact of population growth on economic development in India.
2. To analyse the impact of population growth on unemployment.

### **METHODOLOGY**

The present study is based on secondary data. Secondary data be collected from various sources like, websites, economic survey, census report 2011 and pratiyogita darpan 2018, etc. In the present study, four parameters have been taken i.e. GDP growth rate, National Income, Per Capita Income and Unemployment Rate; and the effect of population growth on economic development will measure.

## **REVIEW OF LITERATURE**

Xiujian Peng (2002) considered the relationship between rise in the population growth's productivity and division of labour. He fixed that productivity changes is not exact explanation of population growth. But he also support that division of labour has increased the productivity. Thus he concludes that the population increase of country assists to improve division of labour of that country.

Kothare (1999) inquire into the relationship between population growth and economic development of the Indian economy. He found that India is a fastest grows economy hence, population growth positively affected on economic development in long run. Because agricultural productivity of India contributes a large proportion in GDP growth rate and India rank one of the top producers in agriculture in the world. Thus, economists are correct in saying that population growth has a positive effect on economic growth of a nation. In reality, economists might say, "If it weren't for its high populations India would still be a suffering developing nation.

Gill (1992) evaluated the relationship between population growth and economic development of the Indian economy. He elaborately talks about the population growth is good but up to a little, while large growth of population caused pressure on resources of an economy. Large growth of population has negative impact on economic development.

Onwuka (2006) investigated the effect of population growth on economic growth in Nigerian economy between 1980 and 2003. The study took some parameters i.e., annual time series data for its analysis, among the variables of interest incorporated in the model are GDP growth rate, population, large per capita output, oil production, agricultural output among others. Thus, he fixed that the negative relationship existed between the population growth and economic growth during the period considered.

Kotani and Kotani (2012) talks about the effect of net migration on population and economic growth in Indonesian economy between 1993 and 2005. The study conclude that in the two-variable regression lagged fertility does not affect the economic growth; through the study fixed that a significant negative relationship between growing population and economic growth upon the formation of net-migration which is main determinant of growth of economic.

Todaro and Smith (2006) evaluated the relationship between population growth and economic development from a wide proportion. The study started with the challenges of growth rate of population, and move on to review of the world population, where a comparable image is illustrated that what the world's population was previous to, and what it is now changed and how much it will increased in the future. Then the population structure is occurs well explained with special impressiveness on the population drifts in developing countries.

Nam (1994), embarked on an empirical research to understand the relationship between population growth and work force. The empirical results show that if population increases, then there will be more people engaged in work and contribute to their country's economy. He also discuss about economic growth and development, resulting that the relationship between population growth and economic growth and development of the country which may or may not be true for all the countries.

Ganguli (1974), explain briefly inverse relationship between population increase and economic

growth. He talks about 'population pressure' and 'natural resources'. 'Natural resources' mean both renewable resources are "free gifts of nature". 'Population pressure' is a function of two variables (a) size and (b) per capita consumption of renewable and non-renewable resources. He also talks about there exist disparity between the rich and poor countries, which is reflected in the sharp disparity in the 'resources' per head of population as between the two group of countries.

Seal and Parthasarathy (1974) discuss relationship between population and demographic development. They analyse theories of population such as Malthusian theory, Karl Max theory etc. and conclude there are fertility and mortality plays important role for population growth. He deals four stage of demographic development. First stage is high level of fertility and high level of mortality, second stage is high level of fertility and low level of mortality, third stage is low level of mortality and decline level of fertility and lastly low level of mortality and low level of fertility.

Kafiluddin (2002) embarked on an empirical research about population growth and economic development from two aspects: the first is the global aspect and the other is Bangladesh aspect. The empirical results show that the economic results of population growth. He takes some parameters and also discuss about the implications of a high growth of population on the economy in terms of employment levels, productivity and skills of labour, income disparities and changes in the production sectors to keep pace with the international markets.

#### **CURRENT SCENARIO OF INDIA**

India is the 7th largest country in the world in area, with a total area of 3,287,263 square kilometer (1,269,219 sq mi). India measures 3214 km (1997 mi) from north to south and 2933 km (1822 mi) from east to west. It has a land frontier of 15,106.7 km (9,387 mi) and a coastline of 7516.6 km (4671 mi). India has 22 official languages. According to census of India, the total no. of mother tongues spoken in India is 1652. However, only around 150 languages have a sizable speaking population. India is a land of small farm holders. The average size of operational form holding is about 1.18 hectares. Out of the total 329 million hectares, 124.58 million hectares area is devoted to raising food crops to provide food security for the country. The country is self-sufficient in food grain production; animal husbandry is the most important economic activity in the rural area.

According to 'United Nation Department of Economics and Social Affairs: Population Division', in June 2018, the total population of India is 1,360,557,250. Where, total male population is 702,491,630 (51.6%) and total female population is 658,065,620 (48.4%). Total birth in this year is 12,228,553 and total death in this year is 4,439,675. Population density in India is 413.9 per km<sup>2</sup> (1,071.9 people/ mi<sup>2</sup>). Life expectancy in India is 66.8 years where, male life expectancy is 65.8 and female life expectancy is 68.0. According to latest data published by 'UNESCO Institute for Statistics (Indian Population Literacy)', the total literacy rate in India is 72.14% (686,446,576 persons) of adult population (aged 15 years and above) where, literacy rate for adult male population is 80.95% (395,644,897 persons) and literacy rate for adult female population is 62.84% (290,801,679 persons). Hence, about 265,087,645 adults are illiterate where, 93,131,444 are male and 171,956,201 are female.

**Table-1 : Year wise Population Growth of India**

Year	Population	Growth Rate
2001	1,062,684,631	1.77%
2002	1,081,038,774	1.73%
2003	1,099,279,468	1.68%
2004	1,117,394,449	1.65%
2005	1,135,372,807	1.61%
2006	1,153,207,299	1.57%
2007	1,170,886,968	1.53%
2008	1,188,377,870	1.49%
2009	1,205,626,146	1.45%
2010	1,222,583,343	1.41%
2011	1,239,215,258	1.36%
2012	1,255,517,825	1.32%
2013	1,271,544,257	1.28%
2014	1,287,395,209	1.25%
2015	1,303,171,035	1.23%
2016	1,319,577,958	1.26%
2017	1,336,191,444	1.26%
2018	1,353,014,094	1.26%

*Source: countrymeters. info (based on the latest United Nations data estimate*

During 2018 India population is projected to increase by 17,034,447 people and reach 1,370,048,541 in the beginning of 2019. The natural increases is expected to be positive, as the no. of births will exceed the no. of deaths by 17,589,183. The population of India will be increased by 46,670 persons daily in 2018 where, 75,658 live births average per day (3, 152.40 in an hour) and 27,468 deaths average per day (1,144.50 in an hour).

**Table-2 : State Wise Population, Population Growth and  
Estimated Population of India**

<b>Rank</b>	<b>State/Union Territory</b>	<b>Population (2011 Census)</b>	<b>Population Growth Rate (%)</b>	<b>Population (2018 Estimation)</b>
1.	Uttar Pradesh	199581477	12.1	223897418
2.	Maharashtra	112372972	11.1	124945748
3.	Bihar	103804637	17.2	121741741
4.	West Bengal	91347736	8.14	98785114
5.	Andhra Pradesh	84665533	3.51	87641369
6.	Madhya Pradesh	72597565	14.27	82961852
7.	Tamil Nadu	72138958	11.29	80288487
8.	Rajasthan	69621012	12.38	77122315
9.	Gujarat	60383628	14.14	68927491
10.	Karnataka	61130704	11.49	68159821
11.	Odisha	41947358	10.07	46172447
12.	Kerala	33387677	4.02	34732356
13.	Jharkhand	32966238	3.58	34149478
14.	Assam	31169272	4.75	32652597
15.	Punjab	27704236	9.98	20471254
16.	Haryana	25353081	11.37	28237755
17.	Chhattisgarh	25540196	6.24	27134411
18.	Jammu & Kashmir	12538926	16.27	14591623
19.	Uttarakhand	10116752	13.21	11453488
20.	Himachal Pradesh	6856509	5.51	7234695
21.	Tripura	3671032	6.63	3914581
22.	Meghalaya	2964007	9.89	3257373
23.	Manipur	2721756	7.79	2933784
24.	Nagaland	1980602	4.18	2063533
25.	Goa	1457723	7.18	1562488
26.	Arunachal Pradesh	1382611	9.34	1511873

---

Rank	State/Union Territory	Population (2011 Census)	Population Growth Rate (%)	Population (2018 Estimation)
27.	Mizoram	1091014	5.98	1156288
28.	Sikkim	607688	8	656328
UT1.	Delhi	16753235	-	-
UT2.	Pondicherry	1244464	-	-
UT3.	Chandigarh	1054686	-	-
UT4.	Andaman & Nicobar	379944	-	-
UT5.	Dadra & Nagar Haveli	342853	-	-
UT6.	Daman & Diu	242911	-	-
UT7.	Lakshadweep	64429	-	-
Total	India	1210193422	11.53	1349800854

Source: <http://www.indiaonlinepages.com/population/state-wise-population-of-india>

Indeed, Uttar Pradesh is most populated state of India. Total population of UP in 2011 was 199,581,477 which is increased by 223,897,418 in 2018. Second is Maharashtra, in 2011 the total population was 112,372,972 which is increased by 124,945,748 in 2018. Lakshadweep is the lowest populated union territory of India; the total population of Lakshadweep in 2011 was 64,429. Daman and Diu is the second last populated union territory of India; in 2011 total population was 242,911.

With a population of over 1.36 billion, India has witnessed a huge growth in its population in the last 50 years. India is a second country in the world after China to cross the one billion mark. It is now estimated that by 2050, India will most likely overtake China to become the most populous country on the earth with 19.4% population living here. The United Nations has estimated that the world population grew at an annual rate of 1.4% during 1990-2000. China registering a much lower annual growth rate of population of 1% as compared to that for India, at 1.95% during 1991-2001. Population of India state like Uttar Pradesh, Maharashtra and Bihar is more than many countries around the world. Only the combined population of U.P and Maharashtra is bigger than USA population. Indian population is almost equal to the combined population of U.S.A, Indonesia, Brazil, Pakistan, Bangladesh and Japan.

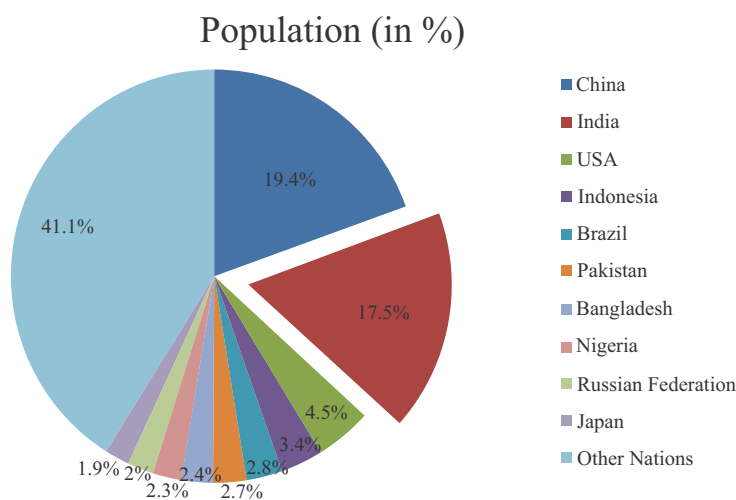


**Table-3 : Countries Proportion of World Population**

Country's Name	Population (in %)
China	19.4
India	17.5
USA	4.5
Indonesia	3.4
Brazil	2.8
Pakistan	2.7
Bangladesh	2.4
Nigeria	2.3
Russian Federation	2.0
Japan	1.9
Other Nations	41.1
Total	100

*Source: Census 2011*

In 2011, population of India at 1210.2 million is almost equal to the combined population of U.S.A, Indonesia, Brazil, Pakistan, Bangladesh and Japan put together-the population of these six countries totals 1214.3 million. Population of India has increased by more than 181 million during the decade 2001-2011. The absolute addition is slightly lower than the population of Brazil, the fifth most populous country in the world.

**Figure-3 : Countries Proportion of World Population**

## **POPULATION AND ECONOMIC PROBLEM**

As we know that India is a second largest populated country in the world so there has a large no. of people in labour market thus, it not possible to provide job to all. In fact, in India the no. of job seekers is expanding so fast that in spite of all endeavour towards planned development, it has not been possible to provide employment to all.

Secondly, rapid population growth in India is food problem. Increased population means more mouths to feed which, but productivity is not increased in the same proportion of population growth. Thus, this is the reason that in India, with rapid growing population is generally faced with a problem of food storage. Despite all their efforts for raising agricultural production, they are not able to feed their growing population.

Next one is, in India large no. population lives in rural area, where agriculture is their backbone. The growth of population is relatively very high in rural areas and it has disturbed the land man ratio. More in advance it has increased the problem of disguised unemployment and reduced per capita farm product in such economic, as the no. of landless workers has largely increased followed by low rate of their wages. The low farm productivity has reduced the propensity to save and invest.

Next problem of population growth is reducing the efforts of labour force. The labour force in an economy is the ratio of working population to the total population. If we assume that in India average life of people is 50 year, the labor workforce is in effect in the age group of 15-50 years. During the demographic transitional phase, the birth rate is high and death rate has declined and due to which the larger percent of total population is in lower age group of 1-5 years, which is small labour force implies that by comparison there are few persons to participate in productive employed.

Another problem of rapid population growth inversely effected on environment, it is precedence's to environmental variation. A large no. of people is being pushed in ecologically sensitive areas such as hill side and tropical forests. It precedence's to the cutting of Forest for cultivation leading to several environment variations. By the side of all this, the population growth increasing tends to the migration of large no. to urban areas with industrialization resulting, in polluted air, water, noise and population in big cities and towns.

A weighty economic problem for growing population is low level of standard of living. Per capita income determined the standard of living of any particular country. The factors affecting per capita income is population growths and also standard of living. The increase in population dominates to an increased demand for food products, clothes, houses etc., but their supply can't be increased at the same proportion due to the lack of cooperate factors like raw material, skilled labour and capital etc. the cost and prices rise which raise the cost of living of the masses. This brings the standard of living low.

Population growth also hampers the rate of capital formation. In India, the composition of population determined to increase capital formation. By cause of higher birth rate and low expectations of life in India, the percentage of dependent population is very high. According to a report in India "Nearly 40 to 50 % of the population is in the non-productive age group which simply consumes and does not produce anything".

India is an economically backward country, there investment requirements are beyond its investing capacity. A rapidly growing population increases the requirements of investment that's at the same time reduces the capacity of the people to save. This is creating an unbalance between

investment requirements and availability of investible funds. As a result, the volume of such investment is determined by such investment is determined by the rate of population growth in an economy.

#### **GROWTH RATE OF GDP IN INDIA**

According to National Statistical Office "After registering GDP growth of over 7% for the third year in succession in 2016-17, the Indian economy is headed for somewhat slower growth, estimated to be 6.5% in 2017-18, as per First Advance Estimates released by CSO. With GDP growth averaging 7.5% between 2014-15 and 2016-17, India can be rated as among the best performing economies in the world on this parameter. Although growth is expected to decline to 6.5% in 2017-18, bringing the 4 year average to 7.3%, the broad story of India's GDP growth to be significantly higher than most economies of the world does not alter. The growth is around 4% points higher than global growth average of last 3 years and nearly 3% points more than the average growth achieved by Emerging Market and Developing Economies (EMDE)".

**Table-04 : Comparison Between Growth Rate of GDP and Population Growth Rate**

<b>Year</b>	<b>GDP growth rate (%)</b>	<b>Change (%)</b>	<b>Population growth rate (%)</b>
2017	6.5	-5.23	1.26
2016	7.1	-12.78	1.26
2015	8.2	10.05	1.23
2014	7.5	16.04	1.25
2013	6.4	17.05	1.28
2012	5.5	-17.01	1.32
2011	6.6	-35.30	1.36
2010	10.3	20.99	1.41
2009	8.5	117.94	1.45
2008	3.9	-60.30	1.49

*Source :- National Statistical Offices*

In 2017, real GDP growth for India was 6.5% and population growth Rate was 1.26%. Hence, GDP increases more rapidly than population growth. In recent years, India's GDP growth fluctuated essentially; it has to tendency to increase and decrease through 1998-2017. But still the growth rate of GDP is greater than of growth rate of population. Here we can see that population growth rate increases at diminishing rate but GDP growth rate continuously increases year by year. In recent year changes in GDP growth is decreasing.

There is a list of Indian states and union territories by GSDP per capita. Gross State Domestic Product (GSDP) is the state counterpart to a country Gross Domestic Product (GDP), the most comprehensive measure of national economic activity. The following table gives the latest available nominal GSDP per capita figures for the state and union territories of available nominal GSDP per capita figures for the states and union territories of India at current prices in Indian rupees.

**Table-5 : List of Indian State and Union Territories GSDP per capita**

Rank	State/Union Territory	GSDP Per Capita in Rs.	Year
1.	Goa	466632	2016-17
2.	Delhi	365882	2016-17
3.	Chandigarh	275454	2015-16
4.	Sikkim	277282	2015-16
5.	Pondicherry	236450	2016-17
6.	Maharashtra	225892	2017-18
7.	Haryana	214509	2016-17
8.	Gujarat	214285	2017-18
9.	Karnataka	206451	2017-18
10.	Kerala	196846	2017-18
11.	Tamil Nadu	184210	2016-17
12.	Himachal Pradesh	182359	2016-17
13.	Telangana	182333	2016-17
14.	Uttarakhand	180520	2015-16
15.	Mizoram	159645	2017-18
16.	Punjab	151624	2016-17
17.	Arunachal Pradesh	139228	2015-16
18.	Andaman and Nicobar	138858	2014-15
19.	Andhra Pradesh	137000	2016-17
20.	Jammu and Kashmir	116153	2017-18
21.	Chhattisgarh	111538	2014-15
22.	Madhya Pradesh	102083	2017-18
23.	Rajasthan	101353	2016-17
24.	West Bengal	100000	2015-16
25.	Meghalaya	98556	2016-17
26.	Odisha	98095	2017-18
27.	Nagaland	89607	2014-15

28.	Assam	80625	2017-18
29.	Tripura	77351	2014-15
30.	Jharkhand	73031	2015-16
31.	Manipur	58442	2014-15
32.	Bihar	63200	2017-18
33.	Dadra and Nagar	-	-
34.	Daman and Diu	-	-
35.	Lakshadweep	-	-
Total	India	112432	2016-17

Sources :- [https://en.m.wikipedia.org/wiki/Income\\_in\\_India](https://en.m.wikipedia.org/wiki/Income_in_India)

From above table we may conclude that, Goa ranked top position on GCDP in 2016-17, secondly Delhi ranked second top position. But Bihar ranked last position on GCDP in 2017-18. We haven't got any information about Dadra and Nagar, Daman and Diu and Lakshadweep.

#### **TRENDS IN INDIA'S NATIONAL INCOME GROWTH AND PER CAPITA INCOME**

According to a websites which is mentioned in below "The real national income of India has increased at an annual average rate of 4.9% during last 60 years of economic planning. There are two distinctive phases of economic growth in India since independence i.e. 1950-80 and 1980-2010. During 1950-80, growth in GDP was 3.2% and during 1980-2010, the growth in GDP was 3.2% and during 1980-2010, the growth in GDP was 6.6% per annum.

India's per capita net national product during the 6 decades of planning has increased at a rate of 3% per annum. The Per Capita Income increased at a modest rate of about 1.8% and 2.0% respectively."

Table we can see that, in recent year, the growth rate of national income and per capita income goes slow down. Because population growth rate being important determinant of economic growth of national income. Whatever increase in national income has been taking place, all these are excavated by the growing population. Thus, in India high rate of growth of population is breaking the growth process and it is responsible for slow growth of national income.

#### **UNEMPLOYMENT RATE IN INDIA**

According to a websites which is mentioned in below "Unemployment rate in India increased to 3.52% in 2017 from 3.51% in 2016. Unemployment rate in India average 4.05% from 1983 until 2017, reaching an all time high of 8.30% in 1983 and a record low of 3.14% in 2014. In 2018, the unemployment rate is 5.4% where, urban unemployment rate is 6.5% and rural unemployment is 4.8%".

**Table-6 : Year wise Comparison between Population Growth, National Income and Per Capita Income in India**

Period	Population growth rate (%)	At 1992-2000 Price		At current Price	
		National Income	Per Capita Income	National Income	Per Capita Income
2000-01	1.77	3.7	1.8	7.1	5.2
2001-02	1.73	5.6	3.5	8.9	6.7
2002-03	1.69	4.0	2.4	8.2	6.5
2003-04	1.65	8.2	6.6	12.2	10.6
2004-05	1.61	6.6	4.9	12.9	11.1
2005-06	1.57	9.4	7.8	14.1	12.1
2006-07	1.53	9.4	7.9	16.7	15.0
2007-08	1.49	9.6	8.1	16.4	14.8
2008-09	1.45	6.2	4.7	15.4	13.8
2009-10	1.41	8.2	6.8	15.0	13.4
2010-11(Q)	1.36	8.7	7.2	18.7	17.1
2011-12(R)	1.32	6.5	5.1	15.0	14.5
2012-13	1.28	4.4	3.2	12.7	11.3
2013-14	1.25	6.8	5.4	13.7	12.3
2014-15(A)	1.23	7.4	6.1	11.5	10.1

Source :- [https://www.economicdiscussion.net/essays/essay on the national income](https://www.economicdiscussion.net/essays/essay%20on%20the%20national%20income)

**Table-7 : Comparison Between Unemployment Rate, Population Growth Rate and GDP Growth Rate**

Year	Unemployment Rate (%)	GDP Growth Rate (%)	Population Growth Rate (%)
2018	5.4	-	1.26
2017	3.52	6.5	1.26
2016	3.50	7.1	1.26
2015	3.49	8.2	1.23
2014	3.41	7.5	1.25
2013	3.46	6.4	1.28
2012	3.62	5.5	1.32
2011	3.53	6.6	1.36
2010	3.54	10.3	1.41
2009	3.75	8.5	1.45
2008	4.12	3.9	1.49

Source :- [https://ycharts.com/indicators/india unemployment rate annual](https://ycharts.com/indicators/india_unemployment_rate_annual)

In above table, unemployment rate is continuously increased at the greater proportion from population growth rate. Here GDP growth rate increases but unemployment rate also increases which is negatively affected on economic growth in India.

**Table- 8 : State wise unemployment rate in India**

Rank	State	Unemployment Rate (%)
1.	Andhra Pradesh	4.7
2.	Assam	8.7
3.	Bihar	7.2
4.	Chandigarh	8.1
5.	Chhattisgarh	2.5
6.	Delhi	9.0
7.	Goa	0.0
8.	Gujarat	6.5
9.	Haryana	16.8
10.	Himachal Pradesh	11.8
11.	Jammu and Kashmir	13.2
12.	Jharkhand	8.0
13.	Karnataka	2.2
14.	Kerala	9.3
15.	Madhya Pradesh	2.7
16.	Maharashtra	4.4
17.	Meghalaya	2.0
18.	Odisha	6.3
19.	Pondicherry	0.0
20.	Punjab	8.2
21.	Rajasthan	10.1
22.	Tamil Nadu	0.8
23.	Telangana	1.2
24.	Tripura	22.8
25.	Uttar Pradesh	4.1
26.	Uttarakhand	1.4
27.	West Bengal	7.5

Source :- <https://unemploymentindia.cmie.com>

Goa has the least unemployment rate among the Indian states, while Telengana has the highest unemployment rate. The unemployment rates are produced by CMIE using its consumer pyramids Household Survey machinery. Production of these unemployment rates and their distribution is sponsored by CMIE.

### **RELATIONSHIP BETWEEN POPULATION GROWTH AND ECONOMIC DEVELOPMENT**

Population growth and economic development are co-related. There are inverse relationship between population growth and economic development. Population grows faster rate as well as GDP also increases. But National Income and Per Capita Income goes slow down in recent year. Because population growth being important determinant of growth of national income. In fact rapid population growth has been obstructing economic growth in developing countries like India. As the standard of living of the people is not improving. [Pratik Kumar and S.K. Gupta 2012].

Unemployment people do not add to national output. As for the argument that population growth leads to increase in demand or market for goods, it may noted that the demand or market for goods increase if the real purchasing power in the hands of the people increases. The mere growth of unemployment or paupers cannot lead to greater demand for goods or expansion in their market. As the rate of growth of population exceeds the rate of production, economic development is hampered. A growing population, within a limited geographical area usually puts heavy pressure on the existing factor endowments, especially nature resources of the country. Moreover, if the society has a limited stock of capital, labour may have to be substituted for capital in which case the production function will exhibit the law of diminishing returns. [Ganguli 1974].

A democratic country like India can't adopt coercive method to control population. But, to show how rapid population growth regards economic development, it is necessary to mention that by economic development we mean not only increase in national income (GNP) or per capita income, but also reduction in unemployed as a result of the growth of employment opportunities and reduction in poverty and inequality of income. Since economic growth depends on rate of saving and investment and productivity of labour. [Seal and Parthasarathy 1974].

### **CONCLUSION**

The above analysis leads one to the conclusion that India's rapidly rising population is affecting adversely many facets of the economy. India is a developing country and population growth is an obstacle for economic development in India. Because of higher population, India face many economic problem such as unemployment, food shortage, low standard of living, low rate of capital formation, reduces efficiency of labour, environment exploitation, etc. For a country like India, the immediate problem is to provide jobs to the existing unemployed persons and to absorb new entrants to the labour force. [Mukherjee 1978].

In India, thus a rising population hampers economic growth. It is said 'A rising population is the most formidable obstacle to economic progress in India'. Hence, government needs to make some policies to control rapid population growth. And there is also need for India to engage the higher economic active group in productive activities. Also Endeavour to investment more in human capital development, provide health and education infrastructure, and sensitize the population of the consequences of high population size on the present and future resources use.



**REFERENCE**

- Ganguli B.N., (1974), "Contradiction between Population Increase and Economic Growth", Yojana, Vol. XVIII, No.2
- Kafiluddin A.K.M, (2001), "Population research, environmental conservation and economic development", Dhaka: Ahmed S.et al
- Kothani S and Kothani K, (2012), "The Effect of Net-migration on Population Growth Relationship in Indonesia", Asian Journal of Empirical Research, 2(2)
- Kothare R, (1999), "The impact of Population Growth on Economic Growth in India", Journal of Social Science India, 410
- Kumar Pratik and Gupta S.K., (2012), "Population in India- A Case Study of Jharkhand", Vinoba Bhawe Journal of Economics, Vol. III, No.1
- Lal Banwari and Pilla C.S., (1974), India and World Population Year", Yojana, Vol. XVIII, No.12
- Malthus T.R., (1798), "An Essay on the Principles of Population", J. Johnson, London
- Mukherjee Sajal, (1978), "Population And Economic Growth And A Suitable Population Policy For India", Bihar Herald, Vol. CIII: No.9
- Nam C.B., (1994), "Understanding Population Change", Ilasca II: FF Peacock Publishers Inc
- Onwuka E.C., (2006), "The Effect of Population Growth in Nigeria", Journal of Applied Science, 21(1)
- Seal K.C. and Parthasarathy N.R., (1974), "Theories of Population and Analysis and Demographic Development", Yojana, Vol. XVIII, No.12
- Todaro M.P. and Smith S.C., (2006), Economic Development", Harlow: Pearson Education Ltd
- Xiujian Peng, (2002), "Population Growth, Transaction Efficiency and Economic Development in Selected Asian Countries", IUSSP Regional Conference on South East Asia's Population in a Changing Asian Context Held at Bangkok, Thailand