

---

**IMPACT OF OVER POPULATION ON HEALTH IN INDIA**

**Dr. Anu Atreja**

**Associate Professor**

**Department of Economics**

**Guru Nanak Girls College, Yamuna Nagar**

---

**ABSTRACT**

It is a well-known fact that Asia is the most populous continent in the world and will continue to do so in future. Asia is home to 60% of global population. China and India account for more than half of Asia's population and 36.4% of world's population. India has the second largest population in the world after China with over 1.2 billion, i.e. 17.3% of the world's population which means that one person in every six people on the planet is a resident of India. India historically is an over populated country. Over population is a condition, when the number of existing human population exceeds the carrying capacity of the earth. Result is inability of the environment to support the existing population. Population is both consumer and a supplier, i.e., it generates demand as well as supply of goods and services in the economy. Efficiency of human resource is very much dependent on their physical and mental health. As healthy population can be a source of growth of income and output. It will result in increase in production, increase in income and increase in demand and ultimately will put economy on the path of growth and development. But there is always an optimum level of population. Under and overpopulation can become hindrance in the path of growth. Optimum population is the pre-condition for development of an economy. This paper highlights some major issues related to over population and health that need to be addressed.

## I) INTRODUCTION

Over population is a condition, when the number of existing human population exceeds the carrying capacity of the earth. Result is inability of the environment to support the existing population. Various factors like reduced mortality rate, improved medical facilities, psychological factors, immigration etc. are responsible for this undesirable condition. Excessive population results in poverty, unemployment, economic and social inequalities, overcrowding, depletion of natural resources, environment deterioration and outbreak of diseases. World population is around 7 billion. Table 1 shows top ten countries with highest population.

**TABLE 1: TOP TEN COUNTRIES WITH THE HIGHEST POPULATION**

S.N.	Country	2000 Population	2010 Population	2015 Population	2050 Expected Pop.
1	China	1,268,853,362	1,330,141,295	<b>1,361,512,535</b>	1,303,723,332
2	India	1,004,124,224	1,173,108,018	<b>1,251,695,584</b>	1,656,553,632
3	United States	282,338,631	310,232,863	<b>321,362,789</b>	439,010,253
4	Indonesia	213,829,469	242,968,342	<b>255,993,674</b>	313,020,847
5	Brazil	176,319,621	201,103,330	<b>204,259,812</b>	260,692,493
6	Pakistan	146,404,914	184,404,791	<b>199,085,847</b>	276,428,758
7	Nigeria	123,178,818	152,217,341	<b>181,562,056</b>	264,262,405
8	Bangladesh	130,406,594	156,118,464	<b>168,957,745</b>	233,587,279
9	Russia	146,709,971	139,390,205	<b>142,423,773</b>	109,187,353
10	Japan	126,729,223	126,804,433	<b>126,919,659</b>	93,673,826
<b>TOP TEN Countries</b>		3,618,894,827	4,016,489,082	<b>4,213,773,474</b>	4,950,140,178
<b>Rest of the World</b>		2,466,012,769	2,829,120,878	<b>3,050,850,319</b>	4,306,202,522
<b>TOTAL World Population</b>		6,084,907,596	6,845,609,960	<b>7,264,623,793</b>	9,256,342,700

Source: World Statistics Report 2015

## **II ) POPULATION IN INDIA: AN OVERVIEW**

It is a well-known fact that Asia is the most populous continent in the world and will continue to do so in future. Asia is home to 60% of global population. China and India account for more than half of Asia's population and 36.4% of world's population. India has the second largest population in the world after China with over 1.2 billion, i.e., 17.3% of the world's population which means that one person in every six people on the planet is a resident of India. India historically is an over populated country. Table 2 shows growth of India's population since independence.

**TABLE 2: GROWTH OF INDIA'S POPULATION IN POST-INDEPENDENCE PERIOD**

Census year	Population in Millions	Average Annual Growth Rate %
1951	361.09	1.25
1961	439.23	1.96
1971	548.16	2.22
1981	683.33	2.20
1991	846.42	2.14
2001	1028.74	1.93
2011	1210.19	1.76

**Source:** Census of India, 2001 and 2011

A glance at the above values reveals that there was alarming increase in population from 1951 to 1981.

1981 onwards population has been increasing in absolute numbers, but growth rate has started declining. However increasing population has become a liability for the economy instead of an asset.

## **III) POPULATION AND HEALTH : A CRUCIAL LINKAGE**

Basic production function represents that income and production of the economy depend upon capital, labour, natural resources and entrepreneur, so role of labour /human resource cannot be underestimated for continuous functioning of economic activities. Population is both consumer and a supplier ,i.e., it generates demand as well as supply of goods and services in the economy. Efficiency of human resource is very much dependent on their physical and mental health. As healthy population can

be a source of growth of income and output. It will result in increase in production, increase in income and increase in demand and ultimately will put economy on the path of growth and development. But there is always an optimum level of population. Under and overpopulation can become hindrance in the path of growth. There are two aspects to maintain healthy population. One is preventive and other is curative. Preventive measures save and protect the population .Deforestation policy, systematic planning of new urban/semi urban areas with provision of safe drinking water, health care delivery, IEC activities related to National Health Programme, provision of toilets, special emphasis on maternal and child health, mid-day meals in aanganwaries, vaccination facilities and creating awareness are preventive health care measures. Not forgetting the formation and implementation of effective Disaster Management Plans. Curative aspect takes care that every underlined population should be provided health facilities (as health is the responsibility of the state), which are easily approachable, affordable and patient friendly. In India a three-tiered system has been introduced. At the lowest level, sub-centres (SC) are given the responsibility of dissemination of the public health related knowledge and of services. Next level are Primary Health Centers (PHC) manned by qualified doctors, who provide curative and preventive health-care to the rural population Then at the top level are Community Health Centres (CHC)/District Hospitals offering specialized care. In addition to the three tier system, there are multi-specialty hospitals, which provide disease specific health care and are labeled as Referral hospitals Dasgupta (2005) points out, in India "There is strong capacity for dealing with disease outbreaks when they occur, but not to prevent them from occurring. Impressive capacity also exists for conducting intensive campaigns, but not for sustaining these gains on a continuing basis after the campaign. This is illustrated by the near-eradication of malaria through highly organized efforts in 1950,s and its resurgence when attention shifted to other priorities such as family planning."The three tier system envisaged in the beginning is not sufficient to provide effective health care delivery to the population because each tier of the unit is over burdened with increased population, insufficient infrastructure and resources.

#### **IV ) POPULATION, CLIMATIC CHANGE AND HEALTH**

Increasing population needs shelter so forests are being cut. It has resulted in soil erosion and high temperatures. Over exploitation of coal, oil and natural resources is putting serious effects on our environment and aggravated the similar problems. Forest fires due to high temperatures further raise the temperature. Glaciers are melting. The human body maintains the temperature in ambient temperatures not exceeding 32 degrees C. Above this temperature body fluids are lost through heavy

---

sweating. It results in heat cramps, heat exhaustion and heat stroke, which can be life threatening. Minimum ambient temperatures are also important as temperature has direct relation with the eco system, water and food. Disease causing vectors need ambient temperatures to complete their life cycle and if temperature remains high, the density of disease causing vectors increases and directly impacts the disease index of the population.

According to Global Assessment Report on Disaster Risk Reduction (2009) India stands second in terms of absolute people exposed per year to floods after Bangladesh. Floods result in immediate deaths and injuries, exposure to toxic substances, spread of many infectious diseases like hepatitis, leptospirosis, diarrheal, respiratory and vector-borne diseases. The stagnant waters left behind become breeding grounds for disease causing vectors and give rise to outbreaks of water borne diseases like cholera, hepatitis, gastroenteritis, dermatitis, conjunctivitis there by further increasing the mortality among population already affected by the floods. Recently floods in Uttarakhand caused devastation. There was immediate effect on life causing massive deaths of human-beings and animals. Once the floods subsided, the residual picture became more horrible and grim as those, who survived initially, died due to shortage of safe drinking water, spread of water and vector borne disease, malnutrition, unhygienic conditions and diseases caused by rodents and other pests. Food shortage is caused by flooding of many productive agriculture areas. Flooding also affects drinking water supplies due to concentration of nutrient and chemical contaminants. Fresh water is basic necessity that is being threatened. People in India don't have access to safe drinking water. During outbreaks of various diseases the mortality was more in densely populated areas/colonies because of transmission potential of the diseases.

Air quality is also affected by high temperatures. An increase in fire events will mean increased toxic gases and particulates; change in wind pattern may increase long range transport of air-pollutants. Weather patterns can enhance urban heat-islands. Air pollution further aggravates the respiratory status of the population, who already suffer from chronic respiratory diseases and this is responsible for increasing morbidity and mortality amongst masses.

The prevalence of disease is remarkably at a higher scale amongst the people living in urban slums/semi urban slums. The unhygienic conditions created by a large population in a small area lead to emergence of communicable diseases like tuberculosis ,leptospirosis, water borne diseases like cholera, gastroenteritis, chikungunya, dengue, Japanese encephalitis etc., which has a considerable mortality and morbidity. Thus because of chain of negative health events, absenteeism

from work place, decreased financial resources further lead to insufficient dietary intake affecting mostly the younger and older age group causing substantial deaths among the affected population.

#### V) CONCLUSION

Optimum level of healthy and educated population is an asset to the development and growth. Sustainable and inclusive growth is not possible, if population continues to be above the optimum level. If benefit of development has to touch masses, population growth needs to be monitored and kept at an ambient level. The millennium goals will remain a distant reality, if growth rate of population is not controlled. Gender equality, creating awareness among masses, effective mass campaigns, heavy investment in female literacy and family planning are some important measures to help to maintain optimum level of healthy population.

#### REFERENCES

- Asia Times Online-South Asia News
- Census of India, 2001 and 2011
- Global Assessment Report on Disaster Risk Reduction (2009)
- Dasgupta 'Public Health of India (2005): An Overview, World Bank Policy Research'
- Dr. S.R. Myneni: Consequences of Over Population in India
- Government of India: Health Survey and Development of Committee Report (Bhore Committee)
- World Statistics Report 2015