

Impact of Overpopulation on Indian Economy

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Abstract:

Population is the resource of labour force. The larger the size of population, the larger will be the labour force. Labour alone cannot produce anything. If other resources required for production are and available in sufficient quantity then a labour force is productive assets for a country. If other resources are not available in sufficient quantities, then large labour force can become an obstruction to faster economic growth. Some countries particularly the developing countries have fast growth rate of population. India is the second most populated country in the world with the overall share of 17.70 %. India is projected to be the world's most populous country by 2024. Its population growth rate is 1.13%, ranking 112th in the world in 2017. Population is the means as well as ends of economic development. They are an asset if in adequate strength and prove to be a liability if excess in strength. Population has crossed the optimum limit in India and has become a liability. So problem of population explosion in India has proved to be a big hindrance in the success of economic planning and development. The researcher found that there exists a significant correlation between the population and GDP of India. That is population has no significant impact on the inflation of India. Inflation may be affected due to some other factors. The research and found us that there is no significant negative impact of population growth on the GDP growth of India and the fact is that as the population increases so does the GDP. Although overpopulation has not affected the GDP and infect GDP of India has grown very fast from last two decades. India is now 3rd largest economy with GDP (PPP) \$10.40 trillion but due to

population explosion still it is ranked 116th country in terms of per capital income and 130th position in terms of HDI. Population explosion is adversely affecting the standard of living. Overpopulation creates the problems like unemployment, shortage of food, low per capita income, problem of capital formation, high pressure, social problems, economic insecurity, social insecurity, increases pressure on land and environment degradation. This paper intends to highlight how the fast growth of population affects the economic development of the country.

Keywords: Over-population, GDP, per capita income, HDI, Economic development.

Objective of the study - The main objective of this study is to know about the hypothesis i.e. how do human resources make an impact on economic development of the country.

Hypothesis of study - Hypothesis taken in this study is as follows

1. Population is growing rapidly in India.
2. Increasing population is constraint for development.

Introduction: In initial stages of human history as well as pre-history, the human population grew at a snail's speed till 17th century (i.e. .002% per year) with advancement in science, agriculture and industry the population growth began to accelerate. It took mankind more than a million years to reach the first billion around the year 1800. By the year 1900, a second billion was added and the twentieth century has added another 3.7 billion. The present world population is estimated at 6.8 billion. Every four days the world population increases by one million. India, the largest democratic country in the world covers 2.4% of the total land of the world and 16% of the total world population inhabits in it. Every year about 1.6 crores persons are added to its population. According to the United Nations Fund on Population Activities (UNFPA) the world population increases by about 78 crores every year, India contributes about one-fifth of this growth. According to 2011 census, India now has a population of 1.2 billion comprising 624 million males and 587 million females. This is an increase of 181 million people since the census 2001 which is nearly equivalent

The population of India represents 17.70% of the world's total population which arguably means that one person in every 6 people on the earth is a resident of India. So problem of population explosion in India has proved to be a big hindrance in the success of economic planning and development. Population is means as well as ends of economic development in India. It an asset if in adequate strength and prove to be a liability if excess in strength. So problem of overpopulation in India has proved to be a big obstacle in the success of economic planning and development. The current population of India contributes to 17% of the global population. And, all these people are unevenly distributed across 3.28 million square kilometres of our geographical area. According to the 2001 Census, Uttar Pradesh is the highest populated state in India with a total number of 166 million people. While on the other hand, states like Sikkim and Lakshadweep have the lowest population of 0.5 million in Sikkim and only 60000 people in the island state of Lakshadweep. Furthermore, about half of the India's population is distributed into five major states- Uttar Pradesh, Maharashtra, Bihar, West Bengal, and Andhra Pradesh. Though Rajasthan is the largest state in size, its population contributes to only 5.5% of the total population of India.

Although overpopulation has not affected the GDP and infect GDP of India has grown very fast from last two decades. India is now 3rd largest economy with GDP (PPP) \$10.40 trillion but due to population explosion still it is ranked 116th country in terms of per capital income and 130th position in terms of HDI. Population explosion is adversely affecting the standard of living. Overpopulation creates the problems like unemployment, shortage of food, low per capita income, problem of capital formation, high pressure, social problems, economic insecurity, social insecurity, increases pressure on land and environment degradation. The economic planning and development of India, is very much influenced by the changes in population. India with its increasing human resources and abundant natural resources is still considered a developing country. India is still not in a position to use its natural resources adequately for the welfare of the growing population. Poverty prevails to great extent in India due to poor clothing, inadequate housing, poor medical care and malnutrition. The situation in India today is marked in terms of lack of electricity in many villages, insufficient food for a large part of its population and very little health care and education facilities.

Population Growth and economic Development:

POPULATION GROWTH AND ECONOMIC DEVELOPMENT-

Population growth hampers the economic development in many ways,

1) Overuse of Natural Resources:

The natural resources are under increasing strain, even though the majority of people survive at subsistence level. Population pressure on arable land contributes to the land degradation. The increasing population numbers and growing affluence have already resulted in rapid growth of energy production and consumption in India. The environmental effects like ground water and surface water contamination; air pollution and global warming are of growing concern owing to increasing consumption levels. The paper concludes with some policy reflections, the policy aimed at overall development should certainly include efforts to control population and environmental pollution.

Pressure on land: The extent of agricultural intensification and extensification characterized by increase in cropping and irrigation intensity and higher use of chemical fertilizers, pesticides and insecticides. The process of agricultural extensification and intensification is leading to land degradation, overexploitation of underground water resources, increased use of chemical fertilizers leading to eutrophication and water pollution. Agricultural intensification for the reason that of increasing cropping intensity, irrigation intensity and excessive use of chemical fertilizers resulting into water logging, salinization and alkalization of croplands and eutrophication of water bodies and ill health of oceans and thus reductions in biodiversity.

Land/soil degradation: The increasing intensification and extensification and results in salination, alkalization and water logging in irrigated areas of the country. For achieving and maintaining food security, sustainable forestry, agricultural and rural developments controlling of land/soil erosion is very much necessary.

Forest resources: To regulate unabated diversion of forestland for non-forestry purposes, Forest (Conservation) Act, 1980 was enacted. It has resulted in reduction of diversion of forest area for non-forestry purposes considerably and the present rate of diversion is 16,000 hectare annually (Economic Survey of India, 1998-99). Forests are an important natural resource of India. They

play an important role in providing raw materials to industries and generating income and 9 employment. Forests and play an important role in enhancing the quality of environment by influencing the ecological balance and life support system (checking soil erosion, maintaining soil fertility, conserving water, regulating water cycles and floods, balancing carbon dioxide and oxygen content in atmosphere etc. They have moderate influence against floods and thus they protect the soil erosion. Declining per capita forest land and agricultural land The population growth has resulted in a downward trend in per capita availability of forest and agricultural land since the 1950s. Per capita availability of forests in India is much lower than the world average. Over the last ten years, despite governmental initiatives of joint forest management, tree grower's co-operative movements and other efforts tangible results are still to be observed, and forest depletion and degradation is still increasing. Similarly, the per capita availability of agricultural land in rural areas has decline consistently from 0.638 hectare in 1950-51 to 0.271 hectare in 1998-99 and is expected to decline further as population continues to grow.

Net Availability of Food Grains in India:

The per capita net availability of food grains in India is presented in Table 8. The per capita net availability of food grains in India indicates that, there is an availability or shortage of food grains in the country. Increasing trends in per capita availability of food grains is largely due to cereals. Although, per capita availability of pulses seems to have gone down since 1961 but the availability of the edible oil, sugar and cotton cloth depict an increasing trend. Overall the per capita availability of food grains had gone up from 395 grams per capita per day in 1951 to 458 grams per capita per day in 1999-2000. The per capita availability of cereals increased from 334 grams per capita per day in 1951 to 426 grams per capita per day in 1999-2000. Furthermore, per capita availability of pulses 10 declined from 61 grams per capita per day to 32 grams per capita per day over the period. However, the per capita per day availability of pulses had gone down during the period but simultaneously the per capita per day availability of edible oil, sugar and cotton cloth has been consistently increased during the period. Of course, availability does not mean accessibility for the reason that of lack of purchasing power among poor sections of society. However, better organizational management can assure better distribution and thus consumption when the availability is assured

Rising Demand for Energy : The production of electricity has increased from 5 billion KWH in 1950-51 to about 500 billion KWH in 2000-2001. The shares of thermal power and hydropower changed substantially. The share of thermal power has increased from 51 percent in 1950-51 to about 82 percent in 2000-2001 whereas the share of hydropower declined from 49 percent in 1950-51 to about 15 percent in 2000-2001. The share of nuclear power is nominal. This clearly indicates that burning of fossil fuels, especially coals, emits lot of carbon dioxide in the atmosphere and leads to global warming. The increasing population numbers and growing affluence have already resulted in rapid growth of energy production and consumption in India, and this trend can only be expected to accelerate in the future. A considerable amount of air pollution results from burning of fossil fuels. Moreover the resources for fossil fuels are and limited thus exploration of alternate energy resources would provide the way out.

Air Pollution: India is one of the most degraded environment countries in the world and it is paying heavy health and economic price for it. According to a World Bank sponsored study, estimated environmental damage in the year 1992 amounted to about US \$ 10 billion or Rs. 34,000 crores, which is 4.5 % of GDP. Urban air pollution costs India US \$ 1.3 billion a year. Water degradation leads to health costs amounting to US \$ 5.7 million every year, nearly 60 percent of the total environmental cost. Soil erosion affects 83 to 163 million hectares of land every year. Beside, land degradation leads to productivity loss equal to US \$ 2.4 billion or 4 to 6.3 percent of the agricultural productivity every year (UNDP 1998).

Global Warming and Climate Change: The country's large population and rapidly increasing energy use plays an important and growing role in global warming. Global warming can have major physical, environmental and socioeconomic consequences, which can be both positive and negative. The estimation of these impacts is complex and marked with uncertainties. Climate change would cause changes in 14 precipitation patterns, ocean circulation and marine systems, soil moisture, water availability, and sea level rise. These would make an impact on agriculture, forestry and natural eco-systems like wetlands and fisheries. And with rising temperatures, and subsequent increasing heat stress and alternation in patterns of vector-borne diseases, the global

population would be more vulnerable to health problems, causing disruptions in settlement patterns and large-scale migration. All these would have significant socio-economic consequences (Compendium of environment statistics, 2000).

2) Effect on per Capita Income:

Large size of population in India and its rapid rate of growth results into low per capita availability of capital. From 1950-51 to 1980-81. India's national income grew at an average annual rate of 3.6 percent per annum. But per capita income had risen around one percent. It is due the fact that population growth has increased by 2.5 percent.

3) Impact on agricultural development: Increasing population coupled with land degradation aggravates challenges of crop production. Overpopulation resulted in land resource scarcity, fragmentation of farm plots, and ecological degradation such as increasing emissions, soil erosion, deforestation, and the overuse of natural resources.

4) Impact on Employment: Rapidly increasing population plunges the economy into mass unemployment and under-employment. As population increases, the proportion of workers to total population rises. But in the absence of complementary resources, it is not possible to expand jobs. The result is that with the rise in labour force, unemployment and under-employment increases. A rapidly increasing population reduces income, savings and investment. Thus, capital formation is retarded and job opportunities are reduced, thereby increasing unemployment. Moreover, as the labour force increases in relation to land, capital and other resources, complementary factors available per workers decline. As a result, unemployment increases. India has a backlog of unemployment which keeps on growing with a rapidly increasing population. This tends to increase the level of unemployment manifold as compared with actual increase in labour force.

5) Problem of Investment Requirement:

Indian population is growing at a rate of 1.8 percent per annum. In order to achieve a given rate of increase in per capita income, larger investment is needed. This adversely affects the growth rate of the economy. In India, annual growth rate of population is 1.8 percent and capital output ratio

is 4:1. It means that in order to stabilize the existing economic growth rate $(4 \times 1.8) = 7.2$ percent of national income must be invested.

6) **Low Standard of Living:**

Rapid growth of population accounts for low standard of living in India. Even the bare necessities of life are not available adequately. According to Dr. Chander Shekhar population in India increases by about 1.60 crore. It requires 121 lakh tones of food grains, 1.9 lakh meters of cloth and 2.6 lakh houses and 52 lakh additional jobs.

7) **Poverty:** Rising population increases poverty in India. People have to spend a large portion of their resources for bringing up of their wards. It results into less saving and low rate of capital formation. Hence improvement in production technique becomes impossible. It means low productivity of labour.

Conclusion:

The above analysis shows that high growth rate of population has slowed down the pace of economic development in the developing countries. On the basis of above argument my hypothesis holds true that population growth is constraint for development. It is found that the fast increasing population makes the task of absorbing the labour force in productive activities all the more difficult. So large increase in population is more a liability than an asset in the developing countries. It has and been and examined that increasing demand for agricultural land, firewood, dwelling units' etc. results in deforestation which adversely affects soil fertility, causes floods and affects the climate. It can be concluded large size of population and its fast rate of growth increases the consumption needs. This increases consumption expenditure. So saving rate and capital formation does not increase much. A part of resources mobilized by such economies are eaten away by fast growing population. Despite this conclusion I want to express that the correlation between population growth and economic development could be favorable only when increasing population is proportionate to resources available in country and resources are to be exploited in its full capacity, in effective and efficient manner by the skillful, talented human resources in the countries like India.

Population is very important for the development of a nation. It is the means as well as ends of economic development. Population is an important asset for the nation but becomes liability if it is uncontrolled. Population has crossed the optimum limit in India and has become a liability. So problem of population explosion in India has proved to be a big hindrance in the success of economic planning and development. From last two decades population has increased from 983 million in 1998 to 1283.60 million in 2017 that is 30.58% increase. Although overpopulation has not affected the GDP and infect GDP of India has grown very fast from last two decades. India is now 3rd largest economy with GDP (PPP) \$10.40 trillion but due to population explosion still it is ranked 116th country in terms of per capital income and 130th position in terms of HDI. Population explosion is adversely affecting the standard of living. Overpopulation creates the problems like unemployment, shortage of food, low per capita income, problem of capital formation, high pressure, social problems, economic insecurity, social insecurity, increases pressure on land and environment degradation. The economic planning and development of India, is very much influenced by the changes in population. India with its increasing human resources and abundant natural resources is still considered a developing country. India is still not in a position to use its natural resources adequately for the welfare of the growing population. Poverty prevails to great extent in India due to poor clothing, inadequate housing, poor medical care and malnutrition. The situation in India today is marked in terms of lack of electricity in many villages, insufficient food for a large part of its population and very little health care and education facilities.

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