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Cause Of Environmental Degdradation In India And Its Remedies

Dr. Md Moniruzzaman Sheikh
Assistant Professor , Department of Economics
Hatsingimari College, Hatsingimari

Abstract:

Achieving rapid economic development in a country like India has become a kind of threaten in environment. A faster growth of population in the country induces faster expansion of agricultural growth and unplanned industrialization to meet huge demand for food and other necessities that outcomes environmental degradation. India is one of the fastest growing economies of the world and will continue its widespread and rapid urbanization and industrialization often compels planners to overlook the importance of maintaining a natural balance in environment. The unplanned behavior of economy has resulted ecological imbalance with disastrous fallouts such as deleting natural resources, degraded land, disappearing forests, endangered species, dangerous toxins, global warming etc. Population pressure contributes to land degradation and soil erosion, thus affecting productive resource base of the economy. The present paper is an attempt to study the population in India and its impacts on land, forest and water and energy resources. The paper concludes with some policy reflections and emphasizes the potential importance of natural resources.

Key words: Population, development, environment, degradation, India, Natural resources.

1. Introduction:

Our global human population, 7.5 billion at present, will cross the 11.2 billion marks by 2100. At the same time population growth was increased rapidly in India. According to population census-2011, Indian population increased from 36.1crores in 1951 to121.1 crores in 2011. India accounts for 15% of world's population but has only 2.4% of the world's land area. The density of population was 117 persons in 1951per square kilometer, further it has gone up to 368 in 2011 and it always shows an increasing trend over the census years.

This excessive pressure of population on limited land and resources has created serious environment problems through destruction of earth's soil and ecosystem which contributed food crisis. Population growth led to increase fragmentation of agricultural land, an increasing level of air pollution from traffic, water pollution from sewage, and an inability to handle solid waste which brings serious environment hazards.

However, accelerate economic growth has needed for rapid growing population with high consumption level in developed countries and aspirations of developing countries to reach matching levels of growth are continuing to damage exploitation of Earth's natural resources is currently a serious condition of human

existence. India is one of the fastest growing economies of the world and will continue its widespread and rapid urbanization and industrialization often compels planners to overlook the importance of maintaining a natural balance in environment. The uncontrolled economic development have resulted ecological imbalance with unfortunate environment such as deleting natural resources, degraded land, disappearing forests, endangered species, dangerous toxins, global warming etc. Therefore, it should be a reasonable compromise between developmental activities and conservation of the environment. Since long a course of action plan was resolved in Rio-declaration to improve environmental degradation, to reduce the loss of biodiversity and emission of greenhouse gases and to go ahead towards sustainable development. Emission of greenhouse gases from automobiles, power plants etc. is known to be a prime contributor to global warming and climate change. Adaptation and mitigation of this threat is a responsibility not only of individual country or community but calls for necessary action from the International Community. Like all other countries, India needs to find a way to ensure environmental sustainability without compromising its economic and social development.

2. Importance of the study:

The relationship between population growth, resource depletion and environmental degradation has been a matter of debate for present decades. The argument has been between those who viewed that high population grow this the main cause in increasing pressure on the environment and those who place more blame on economic development, non-sustainable agricultural and industrial practices, and excessive and wasteful consumption. In fact, both population growth and economic development strategies are cause for environmental degradation in India. Though the relationship is complex, population size and growth tend to expand and accelerate these human impacts on the environment. Government, non-government organization as well as international agencies are trying to solve environmental problems by adopting various strategies but still every country of the world has facing environmental problem seriously. The present paper examines the relationship of growing population with environment and it also examines various reasons of environmental degradation in India. So this study would be beneficial for future research workers and policy makers.

3. Objectives of the study:

I. It has attempted to study the present population growth scenario of India.
II. To examine the effect of excessive population growth on environmental degradation in India and find out their solution.

4. Methodology of Study:

The descriptive research methodology has been used for the study of the paper. The proposed paper would be completely depended on secondary data. To evaluate the overall population growth scenario related to environmental degradation in India, secondary data has been collected from various published sources like Population census data from census commissioner from year to year, Government and Semi-government publications, websites of various agencies, books, journals, newspapers etc. The collected information would be processed and analyzed for the meaningful completion of the study.

5. Presentation and Analysis:

To know the effect of population growth related to environmental degradation in India, we are to study present population growth scenario of India whether it excessive or not as well as India's present economic growth strategies to feed the excess population and their impact on environment. The population growth, economic development strategies of India and their impact on environment, can be analyzed by the following heads,

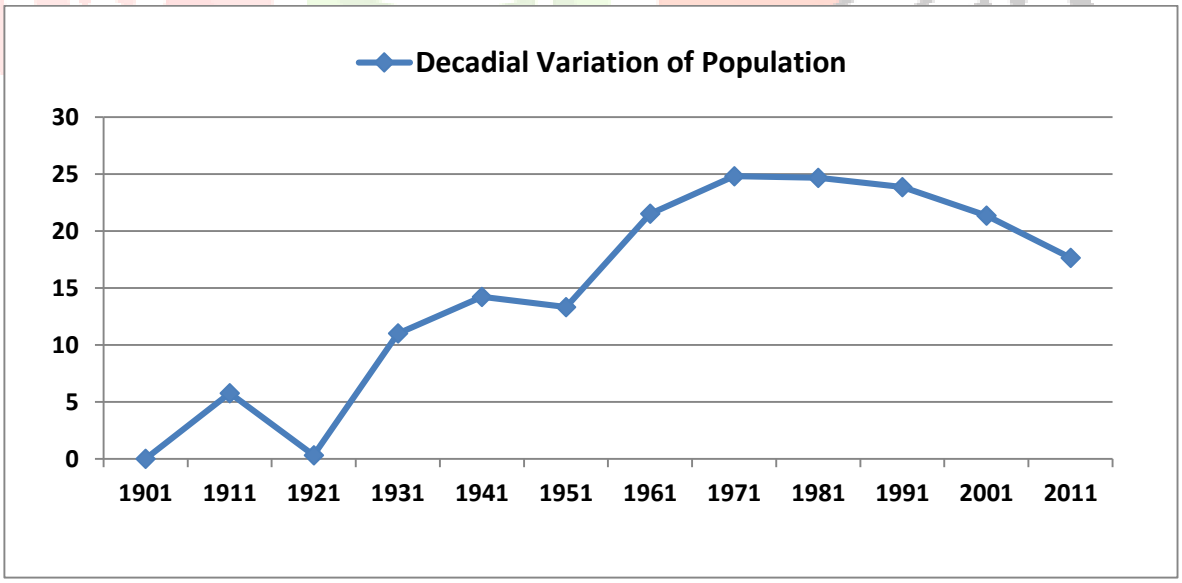
5.1 Growth of population in India:

India is the second most populous country in the world after China. Recently, the population of India has crossed the one billion marks. According to the Census of India 2011, the population of India on 1st March 20011 was 1210.6million. At the time of independence, the country's population was 342 million. The number has multiplied three-fold in around five decades. The population growth of India from 1901 to 2011 is presented in the following table.

Table (Growth of population in India)

Year	Population (in millions)	Practical decadal variation	Density per sq. km.	Ratio of Population with 1901 as base
1	2	3	4	5
1901	238.4	-	77	100
1911	252.1	5.75	82	106
1921	251.3	0.31	81	105
1931	278.9	11.00	90	117
1941	318.7	14.22	103	134
1951	361.1	13.31	117	151
1961	439.2	21.51	142	184
1971	548.2	24.80	177	229
1981	683.3	24.66	230	286
1991	846.3	23.85	267	355
2001	1027.0	21.35	325	430
2011	1210.6	17.64	368	507

Source: Population Census of India 1901 to 2011.



The total population size of India had grown from 238.4 million in 1951 to around 1210.6 million in 2011. The population of India increased by nearly four times during the period of 1901-2011. The decadal growth rates of the population are irregular, as it increased from 5.75 percent in 1911 to 13.31 percent in 1951. It climbed to 24.7 percent in 1981, 23.8 percent in 1991 and 17.64 percent in 2011. There are various reasons for this variation in the trend of population growth rate in various censuses. The increase in population has been due to the improvement in health conditions and control of diseases. The density of population has gone up from 77

in 1901 to 117 persons in 1951, further it has gone up to 368 in 2011 and it always shows an increasing trend over the census years in persons per square kilometer. Several push and pull factors are presumed to be operative towards distress out migration from rural to urban areas. This might be due to the declining resource availability per capita and shrinking economic opportunities in rural areas, and better economic opportunities, health and educational facilities etc. in urban areas, providing opportunities for higher level of human capital development could be the underlying factors for rural out migration.

5.2 Development strategies of India:

Demand for both agricultural products and industrial products have increased for the rapid growth of population for their standard of living. A lot of strategies are taken by Indian government during planning period for economic development of the country, where it has provided much priority on industrial sector. Agriculture provides employment to as many as 54.6 per cent of Indian population besides supplying food to all creatures and raw materials to all industries. The share of agriculture& allied in GDP was 51.81,while share of industry was 14.16 per cent in 1950-51. As the process of industrialization and economic growth under the Five-Year Plans with manufacturing and service sectors growing rapidly and agriculture sector limping along, as a result the share of agriculture & allied in GDP declined to 18.20 per cent in 2013-14, but share of industry increased to 24.77 per cent. Further India's share of agriculture & allied in GDP declined to15.4 percent while share of industry was 23 percent in 2017-18.

Population growth and economic development are contributing many serious environmental problems in India. These include excessive pressure on land, soil degradation, forests, habitat destruction and loss of biodiversity, changing consumption pattern, rising demand for energy led to air pollution, global warming and climate change and water pollution etc. Some major environmental problem which has created for rapid growth of population can be explained as following heads.

5.3.1 Trends in poverty and its environmental effects in India

The high growth rate of population has created number of unproductive consumers in India which create food problem and massive poverty for India. The absolute number of poor was 260 million in 1999-2000 in India. Poverty is said to be both cause and effect of environment degradation. Poorer people, who cannot meet their subsistence needs through purchase, are forced to use common property resources such as forests for food and fuel, pastures for fodder, and ponds and rivers for water. The deterioration of natural resources and unsafe living conditions affects the environment and health of the poor people.

5.3.2 Land and soil degradation:

The high growth rate of population has provided excessive pressure on agricultural land in India. Today every million hectares of land supports 7.27 million people. In India 43 percent of the land is under cultivation, one of the highest in the world. Over the past fifty years, while India's total population increased by about 3 times of 361.1 million in 1951 to1027.0 in 2001, at the same time, the total area of land under cultivation increased by only 20.27 percent from 118.75 million hectares to 142.82 million hectares. Out of the total geographical area of 328.7 million hectares, 175 million hectares are considered to be land-degraded area. Water and wind is the major contributor of 141.3 million hectares to soil erosion. While soil erosion by rain and river in hill areas causes landslides and floods, deforestation has resulted in areas to heavy soil erosion.

5.3.3 Destruction of forest resources:

The total area under forests was 675.54 thousand square kilometers in 2001, which was 21 percent of the total geographical area, as against the National Forest Policy 1988 stipulation of a target of 33 percent. Even within this recorded area, only 416.81 thousand square kilometers, or only 12.68 percent of country's total land area, is dense forest with a crown density, thus reflecting a qualitative decline of forests in the

country. The population growth has resulted in a downward trend in per capita availability of forest land since the 1950s. The per capita availability of forest land declined from 0.124 hectares per capita from 1960 to 0.071 hectares in 1998. For the increasing habitation of growing population, a large scale of grazing forest land has occupied by the people for shelter and cultivation. As a result, conflict between men and wild animal has been starting from few years ago.

5.3.4 Habitat destruction and loss of biodiversity:

Biodiversity has direct consumptive value in food, agriculture, medicine, industry etc. India is one of the 12 mega-biodiversity countries of the world. From about 70 percent of the total geographical area surveyed so far 46,000 plant species and 81,000 animal species representing about 7 percent of the world's flora and 6.5 percent of the world's fauna have been described. Population growth leads to expanding human settlements and increasing demand for food, fuel and building materials. Modernization of agriculture also threatens potentially valuable local crops. Biodiversity the world over is in danger because the habitats are threatened due to such development programmes as creation of reservoir, mining, forest clearing, lying of communication and transport networks etc.

5.3.5 Air pollution:

There were about 10 motor vehicles for every 1000 people or a total of roughly 10 million motor vehicles in the country in 2000. In 2020, there will be about 44 motor vehicles for every 1000 people, making a total of 57 million vehicles (Energy Information Administration, 2001). An increase in vehicular pollution is associated with a number of environmental problems like air pollution and global warming. In most urban areas of India, air pollution has worsened due to traffic jamming, poor housing, poor sanitation and drainage and garbage accumulation. The environmental effects of fuels like oil and petroleum products are of growing concern owing to increasing consumption levels.

The air pollution also arises due to increasing consumption levels of fuels like coal, lignite, oil and nuclear etc. for the rapid industrialization in India. In addition to emission of greenhouse gases from industrial unit, the burning of fossil fuels, burning of traditional fuel adds a large amount of carbon-di-oxide into atmosphere and increases air pollution and global warming have led to several ecological problems and associated with health problems like cancer risk, respiratory diseases and other health problems.

5.3.6 Water scarcity and water pollution

The water pollution in India comes from three main sources: domestic sewage, industry and agriculture. Major industrial sources of pollution in India were fertilizer plants, oil refineries, paper mills, leather tanneries, metal plating and other chemical industries. Levels of solid wastes increased in rivers and lakes and other water systems are also heavily polluted due to the disturbance of solid wastes. Most part of the applied pesticides and fertilizers, irrespective of crop, applicator or the formulation used, ultimately finds its way into the soil. Before pesticides are completely inactivated, they may adversely affect the functioning of non-target microbes and other forms of life inhabiting the soil. The long-term effects of these residues in the human body include carcinogenicity, reduced life span and fertility, increased cholesterol, high infant mortality and varied metabolic and genetic disorders.

6. Suggestions:

Important strategic concerns for sustainable development are as follows:

- Reduction of the unsustainable and unequal use of resources and control of our population growth are essential for the survival of our nation and indeed of human kind everywhere. For this purpose, decadal growth rate of population should be maintained equal to the death rate.
- Men and women should be educated to reduce population growth. More emphasis should be laid on compulsory environmental education at the school level in order to make people aware of the environment protection.
- Changing industrial systems into those that do not use or release toxic chemicals that affect the health of workers and people living in the vicinity of industries can improve health and environment.
- The unutilized land should utilize for plantation of trees for sustaining suitable environment.
- Changing patterns of agriculture away from harmful pesticides, herbicides and insecticides which are injurious to the health of farmers and consumers to using alternatives such as Integrated Pest Management and non-toxic bio-pesticides can improve health condition of food consumers.
- Environmental sensitivity in our country can only grow through a major public awareness campaign by several tools as electronic media, the press, school and college education, adult education, are all essentially complementary to each other.
- The environment protection should not be a responsibility of government alone but local people and leaders should be encouraged to make dedicated efforts to eradicate the environmental problems.

6. Conclusion:

To conclude, it would be noted that population explosion is a social disease. To sum up, there is an urgent need to control population to protect natural resources and make healthy environment for human beings. That is why, all the people of the society should be aware about it. For this purpose maid set of the people should be changed. Proper education and adaptation family planning measures are right approaches for controlling population growth rate in India. A lot of scientific policies are being implemented by government of India as well as state governments to reduce environmental hazards as part of sustainable development strategies. But those strategies could not provide fruitful result for their miss implication. Since, the environmental protection has become an essential part of government's policy therefore it should be implemented strictly and people of the nation act as a safeguard to protect our environment.

REFERENCE:

- Agarwal, K.C. (2001): Environmental Biology, Nidi Publ. Ltd. Bikaner.
- Karpagam M, Environmental Economics, Sterling Publications Private Ltd.
- Walia A, Environmental Studies, Kalyni Publications.
- Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India, Email:mapin@icenet.net (R)
- Brunner R.C. (1989): Hazardous Waste Incineration, McGraw Hill Inc. 480p
- De A.K., Environmental Chemistry, Wiley Eastern Ltd.
- Heywood, V.H &Waston, R.T. (1995): Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
- Jadhav, H & Bhosale, V.M. (1995): Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- Nagdeve. Dewaram A.* population growth and environment degradation in India.
- Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co. (TB)
- Odum, E.P. (1971): Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
- Rao M N. & Datta, A.K. (1987): Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
- Sharma B.K. (2001): Environmental Chemistry. Geol Publ. House, Meerut
- Survey of the Environment, The Hindu (M)