

EFFECT OF OVER POPULATION ON ENVIRONMENT: A STUDY ON INDIAN PERSPECTIVE

Dr. Manas Anand

Assist. Prof.
Deptt. Of Geography
U.P.R.T. Open University, Prayagraj, U.P

Abstract- The population surge has had significant effects on India's rising pollution due to the overexploitation of forests for their natural resources. The vast population is severely impacting the overall forest canopy density in the nation. India has 35 billion trees spread across 2,261km². With a population of 1.43 billion, there are only 24 trees available per person, which is significantly impacting the Air Quality Index and the well-being of people. Overpopulation also leads to environmental issues, partly due to the overexploitation of natural reserves. Currently, the government's policies in India are mainly driven by external funding and are ineffective in addressing the root cause of the population surge. Environment is the source of life on earth and it not only directs but also determines the existence, growth and development of mankind and all its activities. The environment is an integrated system in which all its elements act and react in such a way that a balance is always maintained. Man is a user of the environment for his developmental activities and always disrupts this natural system and creates a background for environmental degradation. As society developed, man's impact on environment grew in scope and strength.

Key Words: population, Environment, development, policies and society.

Introduction:

As India surpasses its economic rival China to claim the throne of the world's most populous nation, it is not quite the 'bow to the king' moment that one would anticipate. While a growing population is not a major impediment to India's economy, India's population is also ageing. This could potentially impact the future direction of the nation. The proportion of those aged 60 years and above is estimated to make up 15% of the total population of India by 2036. This increase in the elderly will need to be supported by the young and working population. That will affect the income per capita of an emerging nation like India. Contribution of India alone to this population was estimated to be 1033 millions. It is estimated that the country's population will increase to 1.26 billion by the year 2016. The projected population indicates that India will be a first most populous country in the world and China will be second in 2050. India having 18% of the world's population on 2.4% of world's total area has greatly increased the pressure on its natural resources. Water shortages, soil exhaustion and erosion, deforestation, air and water pollution afflicts many areas. If the world population continues to multiply, the impact on environment could be devastating. The rapid population growth in a developing country like India are frightening the environment through the expansion and intensification of agriculture, the uncontrolled growth of urbanization and industrialization and the destruction of natural habitats. The pressures on the environment intensify every day as the population grows. The growing trends of population and consequent demand for food, energy, and housing have considerably altered land-use practices and severely degraded India's forest vis-à-vis environment also. The growing population put immense pressure on land extensification at cost of forests and grazing lands because the demand of food could not increase substantially to population. Poverty is amongst the consequences of population growth and its life style play major role in depleting the environment either its fuel demands for cooking or for earning livelihood for their survival. The unequal distribution of resources and limited opportunities cause push and pull factor for people living below poverty line that in turn overburdened the population density and environment get manipulated by manifolds. The population surge has had significant effects on India's rising pollution due to the overexploitation of forests for their natural resources. The vast population is severely impacting the overall forest canopy density in the nation. India has 35 billion trees spread across 2,261km². With a population of 1.43 billion, there are only 24 trees available per person, which is significantly impacting the Air Quality Index and the well-being of people. Overpopulation also leads to environmental issues, partly due to the overexploitation of natural reserves. Currently, the government's policies in India are mainly driven by external funding and are ineffective in addressing the root cause of the population surge.

Environment is the source of life on earth and it not only directs but also determines the existence, growth and development of mankind and all its activities. The environment is an integrated system in which all its elements act and react in such a way that a balance is always maintained. Man is a user of the environment for his developmental activities and always disrupts this natural system and creates a background for environmental degradation. As society developed, man's impact on environment grew in scope and strength.

All the countries are developing at different rates and from differing historical levels of achievement. Such development with a view to meeting the socio-economic needs implies that man must use nature in the process of development. If these changes are not properly adjusted to pressure the harmony of nature and the ecological balance, man faces twin risks: increasing cost of development and imbalances which have severe repercussion on his living conditions. Thus an attempt has been made to explain the impact of population change on environment and vice-versa. An effective protection and improvement of the environment requires a planned as well as rational utilization of natural resources. Therefore, geographical studies of environment and ecology are necessary not only for the knowledge and utilization of resources but also for their planning and conservation or in other words for the sustainable development. The progress of mankind has to be examined in the context of ecological preservation. Therefore it is necessary to study the relevant concepts for better understanding of the changing pattern of man-environment relationship.

The population policy:

Ever since the 1950s, Indian policymakers have implemented several cohesive policies to tackle the surging population growth in the nation. Despite concerted efforts to implement family planning and birth control initiatives, the government has failed to reduce the population growth. Existing policies need to adapt from placing the importance solely on women and introducing broader contraceptive methods to help alleviate the situation. According to an NHFS survey, in Jharkhand, a state in India, the current usage of contraception methods is only 35.7%, of which female sterilization is 23.4% and male sterilization is only 0.4%. Beyond birth control interventions—like the infamous sterilization camps that are now banned due to growing ethical concerns—India must introduce more effective campaigns to reduce population growth. India's total population stands at 1.21 billion, which is 17.7 per cent more than the last decade, and population growth of females was higher than that of males. India's total population as on March 1, 2011 is 1,210,726,932 or 1.21 billion - an increase of 181.96 million persons in absolute number of population during 2001-11. There was an increase of 90.97 million males and increase of 90.99 million females. In 1981, the percentage of urban population was 23.3 per cent, while in 2011 census 31.16 per cent population was urban residing in cities and towns. The overall quality of urban environment has deteriorated over the years and now has reached a point where immediate attention is needed not only by the government but people also. The situation in metropolises like Mumbai, Kolkata, Delhi, Madras, Bangalore, Hyderabad, Ahmedabad, Kanpur, etc., is becoming worse year by year, where even minimum shelter for a large section of population is not available. The government needs to invest more in advertising and educating the Indian population about proper contraceptive methods and their safety.

Population growth and Environmental degradation:

Population is an important source of development, yet it is a major source of environmental degradation when it exceeds the threshold limits of the support systems. Unless the relationship between the multiplying population and the life support system can be stabilized, development programs, howsoever, innovative are not likely to yield desired results. Population impacts on the environment primarily through the use of natural resources and production of wastes and is associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on arable land. Human population issues are extremely important when it comes to our way of life and our future on this planet. Poverty is said to be both cause and effect of environmental degradation. of slums and undesirable land use changes, all of which contribute to urban poverty.

Trends in poverty and its environmental effects in India:

Most of India's poor live in rural areas and are engaged in agriculture. India, with a high density of population relative to resources, faces developmental challenges in alleviating massive poverty and deprivation, and in raising the quality of life of poor people. The growth performance of states has crucial implications in poverty reduction, which is an important objective of the economic policy. India's poverty reductions through the anti-poverty and employment generation programmes along with overall economic growth-planning efforts have helped to reduce the poverty ratio in the country. The people below the poverty line have declined from 55 percent in 1973 to 26 percent in 1999-2000 for India as a whole. Nineteen states and union territories have lesser percentage of population below poverty line than the national average. There are wide interstate variations in the poverty ratios of different states. The poverty ratio in Orissa at 47.15 percent is about eight times that in Punjab (6.16 percent). Almost half the Journal of

Economics and Sustainable Development population in Orissa and Bihar is below the poverty line. On the other hand there are 14 states, which have less than 20 percent of population below the poverty line. The highest percentage of population below poverty line found in Orissa, Bihar and Madhya Pradesh whereas the lowest percentage of population below poverty line found in Jammu and Kashmir, Goa, Punjab, Himachal Pradesh and Haryana. Poverty is said to be both cause and effect of environment degradation. The poverty and rapid population growth are found to coexist and thus seems to reinforcing each other. The poor people, who rely on natural resources more than the rich, deplete natural resources faster as they have no real prospects of gaining access to other types of resources. 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. Moreover degraded environment can accelerate the process of impoverishment, again because the poor depend directly on natural assets. It also contributes to environmental degradation through over exploitation of natural resources like land and water. The deterioration of natural resources and unsafe living conditions affects the environment and health of the poor people. The extent of environmental decay has been directly related to the physical characteristics of the region in question. For example, the north-eastern region has the highest growth of population, but due to its unique physical characteristics such as small population, low population density, and larger forested area, it has experienced a lower degree of environmental degradation. Though the eastern and central regions have higher population, they are however endowed with a larger geographical area and therefore have experienced relatively low levels of environmental degradation (excluding Kolkata). The same trend is visible in the southern and western regions. In contrast, environmental degradation is severe in the northern region due to overpopulation. There was complete coordination and co-existence between man and environment but with the rapid growth of population this balance has not only been disturbed but has become a threat to the ecosystem and is now responsible for the degradation of the environment. The current rate of population growth in India is 1.58%. The amount of resources that could have been available to one person a few years ago now need to be shared between two people, which is not sufficient for either of them.

Review of Literature:

Attempt has been made to the review available literature on growing population and the environmental deterioration.

Sharma (2008)The extent of environmental damage in India caused by rapid population growth and increased economic development is well documented.

Ganesh et al. (2007)There has also been a widespread acquisition of consumer goods by the burgeoning middle and upper classes.

Lakshmana (2008).Diversion of huge tracts of agricultural land for the establishment of industrial estates and special economic zones (SEZ) has directly resulted not only in the shrinkage of agricultural land but also in the migration of displaced agricultural laborers to non-agriculture activities, particularly in the towns .

METHODOLOGY

The method used in this paper is descriptive-evaluative method. The study is mainly review based. It is purely supported by secondary source of data, i.e. books, journals, papers and articles and internet.

Result and Discussions:

India's population grew by 17.7 per cent during 2001-11, against 21.5 per cent in the previous decade. Among the major states, highest growth in population has been recorded in Bihar (25.4 per cent) while 14 states and Union Territories have recorded population growth above 20 per cent. Altogether, 833.5 million persons live in rural areas as per Census 2011, which was more than two-third of the total population, while 377.1 million persons live in urban areas. The correlation between population and environment is one of the most pressing issues of contemporary times and a subject of discussion. The ways in which human beings have changed and are changing the face of the earth and the human role in the natural processes and systems have drawn the attention not only of natural scientists but also of social scientists as well as of planners and policy makers. The interaction between population and environment is very complex and dynamic. Human societies' impacts on the environment are a function of three major, interconnected elements: population size, affluence or consumption, and technology. Man is completely dependent on the environment for his existence. The dynamics of environmental destruction have assumed a global dimension in recent decades and aptly called for deft and immediate handling in this fragile environment. Some of the damages that have taken place already are irreversible and time consuming as well. There is hardly any measure by which we can control natural erosion but some procedures can be adopted to check the constant flow of migrants, man made erosion, which greatly affects the climate and hydrological balance. The environment – natural, economic and cultural – acts and reacts in a composite manner and determines the growth and spatial pattern of the population. On the other hand, human activities create chain reaction in the ecosystem. The entire aspect of planning the environment has a social dimension just because man is at the core of the problem. It is essentially man's influence that has upset the natural balance, and it is in the adaptation of his interaction with the environment that we must seek for ways to restore it. Nature has been increasingly damaged, restorative capabilities have progressively weakened, and human

environment is deteriorating day by day to the point of affecting not only the quality of life but even the very existence of life. The natural imbalances and ecological crises that arise in the present world is due to two reasons – (i) demographic threat, due to mounting population pressure, and (ii) technological threat, due to man's acquisition of higher technological skill and knowledge. That is why man is invading in the remote serene highlands and destroying its beauty and grandeur. The environmental problems are varied and interlinked and owe their origin to ignorance and lack of integrated approach to socioeconomic development based on various considerations of the environment. Societies' environmental impacts take two major forms. First, we consume resources such as land, food, water, soils, and services from healthy ecosystems, such as water filtration through wetlands. Over-consumption uses up or severely depletes supplies of non-renewable resources, such as fossil fuels, and depletes renewable resources such as fisheries and forests if we use them up faster than they can replenish themselves. Second, we emit wastes as a product of our consumption activities, including air and water pollutants, toxic materials, greenhouse gases, and excess nutrients. Some wastes, such as untreated sewage and many pollutants, threaten human health. Others disrupt natural ecosystem functions: for example, excess nitrogen in water supplies causes algal blooms that deplete oxygen and kill fish. To sum up, it is a fact that the causes of environmental degradation can never be totally controlled but can be checked to a great extent. It is, therefore, necessary to pay attention to the problems of environmental degradation and to strike a balance between conservation of nature and population growth. It is only through the people's own initiative and understanding that the fragile ecosystem can be saved from a distance.

Conclusion:

The growing population and the environmental deterioration face the challenge of sustained development without environmental damage. Rapid population growth continues to be a matter of concern for the country as it has manifold effects, most important being land degradation and soil erosion, deforestation and declining per capita land, forest and water resources. The study reveals that rapid population growth has led to the over exploitation of natural resources. Thus the utmost important step to be taken to tackle the problems of environmental degradation and ecological imbalance is to check the population growth. However, a population growth can be an asset only for it has the requisite skills as well as attitudes to add value to the technical and economic environment.

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