

# STUDY OF EFFECTS AND SIGNIFICANCES OF ENVIRONMENTAL POLLUTION

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## Abstract

Man is causing all round harm to atmosphere, water, land, to the different components of condition and to the ecosystem itself. There is so a lot of man-made contamination and environmental debasement that the bad dream ahead is sufficient anxious to shake every one of us. Taking a brief perspective on the general situation a couple of patterns are in progress. Our atmosphere on global just as local scale is intensely contaminated. The defensive ozone shield in the vigorously populated scopes of the northern half of the globe is diminishing twice quick as researchers suspected a couple of years back. The development of greenhouse gases will prompt critical changes in the climate designs sooner rather than later prompting global warming. The decimation of ozone layer and the further warming of the earth surface undermine cataclysmic outcomes, for example, emission of dangerous and tropical illnesses, disturbance of seas evolved way of life, ascending of ocean levels, submersion of numerous islands, softening of little land-based ice sheets, flooding in many low lying waterfront territories and reap misfortune and so on.

**Keywords:** Environment, Pollution.

## Introduction

The concept of environment is as old as the concept of the nature itself. It is a composite term referring to conditions in which organisms consisting of air, water, food, sunlight etc., thrive and become living sources of life for- all the living and non-living beings including plant life. The term also includes atmospheric temperature, wind and its velocity (Khan, 2002).

## Environmental Pollution

Before understanding what "Environmental Pollution" is it is equally necessary to-know what "pollution" is.

## Definition of Pollution

The Royal Commission on Environmental Pollution in U.K. in its third report gave the following definition to the term "Pollution", namely: The introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structure or amenity or interference with legitimate uses of the environment". According to Section 1(3) of the U.K. Environment Protection Act, 1990, the term "Pollution" means: The release (into any environmental medium) from any process of substances which are capable of causing harm to man or any other living organisms supported by the environment. Pollution occurs when there is the potential for harm. Harm of man is not confined to physical injury but encompasses offence caused to

any of his senses or harm to his property, therefore smells and noise which I may not cause injury can constitute pollution (Duxbury and Morton, 2000). Harm to living organisms can include harm to their health or interference with the ecological systems of which they form a part".

## Kinds of Pollution

Environmental pollution may broadly be classified into: (1) Natural pollution; (2) Man-made pollution.

1. **Natural Pollution:** Environment is polluted often by natural phenomenon, such as earthquakes, floods, drought, cyclones, etc.

2. **Man-made Pollution:** Human activities.

The environmental pollution can also be classified further as, Air pollution, water pollution, land pollution, food pollution, noise pollution and radio-active pollution, etc.

## Factors of Environmental Problems

The "environmental crisis" is caused because of condition and ecological changes because of formative procedure of the 'monetary and technological man" of the present century. Indeed if the present century is set apart by financial, logical and technological improvement from one viewpoint, it is tormented by major problems of environmental problems then again. The environmental crisis emerging out of the environmental crumbling brought about by a few types of pollution, consumption of normal assets in

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light of quick pace of their misuse and expanding reliance on vitality consuming and ecologically harming innovations, the loss of natural surroundings because of mechanical, urban and agrarian development, decrease and loss of ecological populaces because of unnecessary utilization of dangerous pesticides and herbicides and loss of a few types of plants because of training of monoculture expulsion of territories through woods freedom has now happened to worldwide concern (Salve, 2001 ; Ashraf et al, 2010 ; Blaxill, 2004). The life of basic man is by and large so quickly unfavourably influenced by environmental debasement brought about by man himself that there has been a stamped development of enthusiasm inside the most recent decade in the nature of the earth, the disturbance of the world's regular ecosystems and the exhaustion of assets.

The most striking explanation of the environmental debasement and subsequently worldwide environmental crisis is the reality of weakening connection among man and condition as a result of quick pace of abuse of characteristic assets, technological advancement and mechanical extension. The pace of environmental change and resultant environmental debasement brought about by human exercises has been so quick and across the board.

The effect of man on condition through his monetary exercises are shifted and exceptionally mind boggling as the change or adjustment of the common condition and procedure prompts a progression of changes in the biotic and abiotic segments of nature. The impacts of man on condition fall into two classifications (i) immediate or deliberate impacts and (ii) aberrant or unexpected impacts, Direct or purposeful effect of human exercises are pre-arranged and planned in light of the fact that man knows about the outcomes, both positive and negative of any program which is propelled to change or alter the indigenous habitat for financial improvement of the area concerned. The effects of anthropogenic changes in the earth are recognizable inside brief time frame and these effects are reversible. Then again the circuitous impacts of human exercises on the earth are not planned and pre-arranged and these impacts emerge from those human exercises which are coordinated to quicken the pace of financial development, particularly mechanical improvement. The aberrant impacts are experienced after significant time-frame when they become aggregate. These circuitous effects of human financial exercises may change the general normal environmental framework and the chain-effects here and there corrupt the earth to such a degree, this gets self-destructive for individuals (Amato et al, 2005).

## **Main Causes of Environmental Pollution**

The problem of environmental pollution, we face today, is a complex consequence of forces connected with various interrelating factors. There are clearly a number of divergent and conflicting views of what could be the basic factors underlying the environmental crisis. No single cause can be considered as the root cause of environmental impairment. However, the following causes could be pointed out as the generally underlying factors though each of these too could be operating simultaneously and their balance may vary from place to place and through time (Fereidoun et al 2007).

### **1. Population growth**

Present day masterminds think about that development of population is the main driver for some human problems. This perception additionally applies to environmental corruption. Increment in the population will have a multiplier impact requiring proportionate increment in all prerequisites fundamental for the presence of people. Population development requires irregular misuse of regular assets to give everyday fundamental necessities of life. It brings about movement of individuals and development of urban zones, consequently welcoming new problems of wellbeing, environment and human sustenance.

### **2. Increased General Affluence and Economic Growth**

The affluence (for example material parts of per capita utilization of merchandise and assets) is a significant factor in man-asset condition relationship. It is the expanding per capita request of rich which is retaining the development in yield of merchandise and enterprises in the created and creating nations and cause abuse or abuse and pollution of assets, for the affluence unparalleled to the essential asset utilization and not persuaded by human prerequisites produce inclination to squander matter and vitality. Shockingly, affluence factor however, greatly affecting condition, is only from time to time discussed. Then again, poor and the neediness frequently get accused for the obliteration of condition. The idea that neediness or the poor crush nature most is nevertheless halfway obvious (Gardiner, 2006).

### **3. Nature of Modern Technology**

The nature of productive technology in recent years is closely related to the environmental crisis. Commoner maintains that sweeping transformations of productive technology since World War II productive technologies with intense impacts on environment have displaced less destructive ones. This factor has been largely responsible for the generation of synthetic and non-

biodegradable substances such as plastics, chemical nitrogen fertilizers, synthetic detergents, synthetic fibres, big cars, petrochemical and other environmentally injurious industries and 'disposable culture. Thus, environmental crisis is the inevitable result of a counter ecological pattern of productive growth. Ecologically benign technologies did and do exist but they are not utilized, for they are considered inconsistent with the short-term interests of private profit maximization.

#### **4. Deforestation**

Backwoods are priceless property of a country since they give crude materials to current ventures, timber for building purposes, natural surroundings for various kinds of creatures and small scale life forms. Great ripe and supplement rich soils having high substance of natural issue, offer security to soils by restricting the dirt's through the system of their foundations and by shielding the dirt's from direct effect of falling raindrops. They empower and increment penetration of water and along these lines permit most extreme energize of groundwater assets, limit surface run-off and consequently diminish the recurrence, power and measurement of floods. They help in expanding the precipitation; they are regular sink of carbon dioxide since they use carbon dioxide to set up their nourishment during the procedure of photosynthesis. They give kindling to a huge number of individuals everywhere throughout the world and nourishment and haven to endless people and creatures. Actually, woodlands are 'life line' of a country since thriving and welfare of the general public straightforwardly relies upon sound and solid backwoods front of a country concerned. Backwoods are principle segment of the biotic segments of the characteristic environmental framework and the dependability of the earth and ecological equalization to a great extent rely upon the status of the woodlands of the district concerned (Gardiner, 2006).

#### **5. Agricultural Development**

Agricultural development means expansion of agricultural land increase in agricultural productivity and net agricultural production. It is due to development of modern scientific techniques, advanced technologies, increased production and use of chemical fertilizers, expansion in irrigational facilities, development of high-yielding varieties of seeds, etc. This has solved the problem of growing demand of food due to ever increasing world population on the one hand; it has also created or is creating hazardous environmental problems of serious concern on the other hand. Thus modern economic and technological man is at the cross road of dangers in all directions (Fereidoun et al, 2007).

#### **6. Industrial Development**

"Rapid Industrial Development has given economic prosperity to human society. It has also given new dimension to socio-economic structure and has provided material comfort to the people of industrially developed countries but it has also created many fold environmental problems. In fact, the glittering effects of industrialization have affected the mind of the general public that industrialisation is now being considered as the parameter of modernity and as a necessary element of socio-economic development of a nation.

#### **7. Urbanization**

Exodus of population from rural areas to urban centre and origin and expansion of new urban centres due to industrial expansion and development are responsible for rapid rate of exploitation of natural resources and several types of environment degradation and pollution in the developed and developing countries. The level of urbanisation in the developed countries of the world has already reached its peak. The accumulation of wealth and availability of more economic and job opportunity in the urban centres have resulted into the concentration of population in the congested metropolitan areas and thus the formation and growth of big slum areas.

#### **8. Unplanned Urbanization**

The slanted urban development has crumbled the environment unmistakably and impressively in both the urban and rustic zones. The urban regions experience the ill effects of their own predicament, squatter settlements, absence of sanitation and water supply, congestion, clog and contamination. The urban areas in India are confronting environmental issues like absence of sanitation, interminable deficiency of traffic clog and so forth. Additionally, the household and industrial waste transfer in the urban regions is intense. The greater parts of the urban areas are deficient with regards to sewer frameworks. For instance contemplates by the Central Board for the aversion and control of water contamination have indicated that the release of network wastage and industrial effluents is the significant reason for water contamination. At present 56% of Class-I urban communities and 87% of Class II towns don't have sewerage facilities. We accordingly need a well-controlled and very much oversight procedure of urbanization so as to check rustic urban movement and other related issues.

#### **9. Coal burnt Thermal Power Plants**

Power Plants either in broad daylight or private division mostly use coal for age of power. About 62% of the coal created in our nation is used for age of power which records of 65% of intensity

age. This procedure brings about the gathering of different results, for example, base debris, kettle slag and fly debris. Fly debris alone adds up to over 70% of the absolute amount. Transfer of this tremendous measure of the debris is a troublesome and delicate errand. Despite the fact that this material can be utilized in assembling of bond, block and furthermore utilized as soil conditioner yet these exercises have not increased a lot of notoriety because of economic and social thought. Regardless of whether the fly debris is used for the previously mentioned exercises, it won't be conceivable to use even 30% to 40% of the debris delivered. In this way there is a need to store the debris delivered so as to have least harm to air, water and soil bodies. An overly warm power plant based on around 800 sections of land of land regularly requires 1200 sections of land for debris transfer. Based on the debris creation slants the territory prerequisite for dumping of the debris is around 40000 hectares. Power plants are ideally put away from the human settlements and besides on squander lands, yet with course of time a portion of the cultivable territory is likewise secured for debris mount site. Nearness of debris particularly in the atmosphere is of significant worry to the individuals living near the plant site. This is particularly serious in summers because of winning high wind speeds. The better divisions of fly debris are conceivably destructive as they get saved in lungs/pneumonic tissues of respiratory track when breathed in (Kimani, 2007 ; Landrigan et al,2002).

## 10. Poverty

It is true that poor cause damage to environment. Due to poverty the people exploit excessively the natural resources of the country for meeting their basic needs (food, fuel, shelter, employment fodder for their cattle). Poverty and need are indeed the greatest polluters as told by late Mrs. Indira Gandhi in her address to the Stockholm Conference. Hence necessary steps should be taken to bring the poor people above the poverty line.

## Conclusion

The causes for environmental problems are many. The multiplicity of causes makes it difficult to clearly delineate the causes and consequences of environmental degradation in terms of simple one to one relationship. The causes and effects are often interwoven in complex webs of social, technological, environmental and political factors. However, some of the very common causes of environmental degradation which can be clearly pointed out are the population growth, the economic growth associated with the affluence factor and change of technology. Population is an important resource for development, yet it is a major cause of environmental degradation when it exceeds the threshold limits of the support systems.

The overriding impact of adverse demographic pressure ultimately falls on our resources and ecosystems. Combined with it the conditions of poverty and underdevelopment themselves create a situation where the people are forced to live in squalor and further degrade their environment. The process of development itself also leads to damage of the environment, if not properly managed. Associated with the rapid economic growth, the extravagant affluence consumes far more resources and put far greater pressure on natural resources. The change of technology causes planned obsolescence causing the generation of more and more wastes which in turn prove ecologically harmful. Short-term interests of private profit maximization, further, hamper the process of replacement of obsolete technologies by the ecologically benign technologies.

## References

1. Amato, G. Liccardi, G. D'Amato, M. & Holgate. S. (2005). Environmental Risk Factors and Allergic Bronchial Asthma, *Clinical & Experimental Allergy*, 35(9), pp.1113- 1124.
2. Ashraf, M. A. Maah, M. J. Yusoff, I. & Mehmood, K. (2010). Effects of Polluted Water Irrigation on Environment and Health of People in Jamber, District Kasur, Pakistan, *International Journal of Basic & Applied Sciences*, 10(3), pp. 37-57.
3. Blaxill, M. F. (2004). What's going on? The Question of Time Trends in Autism. *Public Health Reports*, 119(6), pp. 536-551.
4. Duxbury, R.M.C. and Morton, S.G.C. (2000) *Blackstone's Statutes on Environmental law*. Third Edition, London: Blackstone Press Limited, 2000.
5. Fereidoun, H. Nourddin, M. S. Rreza, N. A. Mohsen, A. Ahmad, R. & Pouria, H. (2007). The Effect of Long-Term Exposure to Particulate Pollution on the Lung Function of Teheranian and Zanjanian Students, *Pakistan Journal of Physiology*, 3(2), pp. 1-5.
6. Gardiner, L. (2006). *Air Pollution Affects Plants, Animals, and Environments. Windows to the Universe*.
7. Khan, I. A. (2002). *Environmental Law*, Central Law Agency, Allahabad, 2002
8. Kimani, N. G. (2007). *Environmental Pollution and Impacts on Public Health: Implications of the Dandora Dumping Site Municipal in Nairobi, Kenya*, United Nations Environment Programme, pp. 1-31.
9. Landrigan, P. J. Schechter, C. B. Lipton, J. M. Fahs, M. C. & Schwartz, J. (2002). *Environmental Pollutants and disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer, and Developmental*

- disabilities, *Environmental Health Perspectives*, 110(7), pp. 721-728.
10. Salve, H. (2001). 'justice Between Generations: Environment and Social Justice', in A.N.Kripal, A. Desai, G Subramaniam, R.

Dhavan and R. Ramachandran eds. *Supreme But Not Infallible*, New Delhi: Oxford University Press, 2001.