

# Roll of Pollutants in Environmental Degradation

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## Abstract

Man and environment is the cooperative aspects to each other. In which, man is a major or survival aspect who react with natural components and changes its quantitative as well as qualitative aspects. The subject of environmental economics is at the forefront of the green debate: the environment can no longer be viewed as an entity separate from the economy. Environmental degradation is of many types and have many consequences. To address this challenge a number of studies have been conducted in both developing and developed countries applying different methods to capture health benefits from improved environmental quality. Minimizing exposure to environmental risk factors by enhancing air quality and access to improved sources of drinking and bathing water, sanitation and clean energy is found to be associated with significant health benefits and can contribute significantly to the achievement of the Millennium Development Goals of environmental sustainability, health and development. So that, Author describe the national and global causes and consequences of environmental degradation and social injustice. We say, that everybody should provide their cooperation in reducing environmental risk and in particular focusing on reduced air pollution, enhanced water quality and climate change mitigation, socio-eco-political crimes.

**Keywords:** Environment, Degradation, Exposing Consequences, Pollution, Exploit, Ecological And Climate.

## Introduction

Man and environment is a major cooperative aspect. In which, human a active aspect. They are always react with natural components. At present time, human exploit natural resource in many way. So that, Resources are reducing and may type of pollutants are emitting toxic material in different forms like gaseous, solid and liquid, which deteriorate as well as polluted to environment. The environment affects our health in a variety of ways. The interaction between human health and the environment has been extensively studied and environmental risks have been proven to significantly impact human health, either directly by exposing people to harmful agents or indirectly, by disrupting life-sustaining ecosystems (Remoundou and Koundouri, 2009).

Environmental qualities are fall down due to over exploiting of natural resources like soil, vegetation, and minerals. The deterioration of ecosystem as well as wildlife, because human activities are growing on. We can define environmental qualities, that, environment or habitats are deteriorating due to changing the environment perceived to be undesirable. Environmental degradation is one of the "Ten Threats" officially cautioned by the High Level Threat Panel of the United Nations. The United Nations International Strategy for Disaster Reduction defines environmental degradation as "The reduction of the capacity of the environment to meet social and ecological objectives and needs". The primary cause of environmental degradation is human practices. The mode of the environmental impact varies with the cause of globalization. Human and their activities are a major source of environmental degradation. Worldwide the greatest effects on the human health as well as animal and plants, and the result is that environmental degradation and social injustices go on. The major causes of above results are including over population, air pollution, noise pollution, water pollution, deforestation due to human activities, global warming, unsustainable agricultural and fishing practices, over consumption, the rise of the corporational units. Mining is also a destructive development activity where ecology suffers at the altar of economy. Scientific mining operations accompanied by ecological restoration and regeneration of mined

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wastelands and judicious use of geological resources, with the respect of a search for eco-friendly substitutes and alternatives must provide sensational revelation to the impact of mining on the human ecosystem.

Here we can include increasing poverty and overcrowding, famine, weather extremes, species loss, acute and chronic medical illnesses, war and human rights abuses, and an increasingly unstable global situation that portends Malthusian chaos and disaster in the global level. Unfortunately, most of the world's governing bodies guided by self-interest/preservation have adapted too slowly to environmental changes and as such face decreasing internal stability and their health care systems in crisis. The report also estimates that at least above 24% of the global disease burden and 23% of all deaths are attributable to environmental factors, and with the environmental burden of diseases being 15 times higher in developing countries than in developed countries, due to differences in exposure to environmental risks cover and access to health carefulness. The major causes of the environmental pollution are globalization such as modern urbanization, industrialization, over-population growth, deforestation etc. Environmental pollution refers to the degradation as well as deterioration of quality and quantity of natural resources. Different kinds of the human activities are the main reasons of environmental degradation and pollution. These have led to environment changes that have become harmful to all living beings including human and animals. The smoke emitted by the domestic burning fuel, vehicles and factories increases the amount of poisonous gases in the atmosphere. Mostly, we can see the above situation regarding pollution in urban areas where population is increasing rapidly. The waste products and solid waste disposal, sewages, smoke emitted by residential areas, vehicles and industries are the main causes of pollution. Unplanned urbanization and industrialization have caused water, air, noise, electromagnetic pollution. Similarly, the smoke emitted by vehicles and industries like Chlorofluorocarbon, nitrogen oxide, carbon monoxide and other dust particles pollute air and another cause of environmental degradation is noise pollution. The main cause of noise pollution are vehicles, loud speakers, mill/industries, social functions etc. the excessive use of natural resources diminishes these resources and creates an imbalance of the environment. This type of results are over consumption of natural resources and unmanaged settlementation. Deforestation, over use of pesticides, chemical fertilizer and insecticides, congested housing or unmanaged urbanization, industrialization and production of litters, sewages and garages etc. are the major reasons to deteriorate the quality of the environment. Pressure of population is awful in town which results are air, water and noise population too. Deforestation provokes wildlife and other organisms to the verge of extinction. The forest area has been cleared for agricultural land, settlement and to collect the useful herbs. This results in environmental degradation. Global warming is another result of environmental degradation. The temperature of the earth is rising warmer and due to rise in temperature, the polar icecaps melting and the ice the colder regions is not as thick as it was before. Many species are lost day by day due to various activities of the human beings. The life of the creature will be in danger if the environment goes on deteriorating in the same way. So, to live a happy and prosperous life we must conserve our environment and should emphasize environmental degradation and its effects.

**Objective of the Study**

1. To acquire knowledge of pollution and environmental degradation.
2. To acquire the environment beyond the immediate environment including distant environment.
3. To acquire a set of values for environmental protection.
4. To develop skills required for making discriminations in form, habits and habitats etc.
5. To provide opportunity to be actively involved at all levels in environmental decision making.

**Methodology**

This paper is based on mostly secondary work. The information is taken from the different journals, internet services, thesis, books and current affairs journals and review etc.

**Pollutants**

A pollutant is defined as any form of energy or matter that causes degradation and pollution in existing natural balance of ecosystems. On the basis of source of genesis pollutants are divided into two main types: 1- Natural pollutants, 2- Man-made pollutants. Generally, pollutants divide in a form of gaseous, liquid and solid. The pollutants are producing a form of environmental degradation. The environmental degradation has divided into two categories-1-Extreme events and hazards, 2- pollutions. Further, extreme events and hazards and pollution are divided into many types, in which, pollutions like air, water, noise, solid waste, electromagnetic, social, political pollution etc. At least pollutants have toxic way. According to Fagin and Lavelle (1999), "Every year 25 billion pounds of toxic pollutants are added to the environment by factories and mines and 2.2 billion pounds per year of pesticides are sprayed on our crops. Annual world production of synthetic organic chemicals has grown exponentially since the early 20 century". Further they expressed that "the vast majority of artificial chemicals have never been screened for toxicity. Chemical manufacturers are not required to prove safety; instead the legal burden is on the government to prove that a product is dangerous, and testing only done after a substance has been impugned." The impacts of pollutant on human health through different type of diseases such as diabetes, chloracne, porphyria cutanea tarda, soft-tissue carcinomas, multiple myeloma, and lung and prostate cancers. Fertilizers and pesticides used in agricultural practices in India, and it reach into rivers, lakes and ground water through circulating and leaching process. Some major pollution and its effects are given and describe below:

Flooding during monsoonal season in India, water pollution problem, as it washes and moves all sorts of solid garbage and contaminated soils into its rivers and wetlands.

**Air Pollution**

At present time, different type and sources, hazardous pollutants are emitted in atmosphere and they deteriorates to the quality of air and situation become as a pollution form. Air pollution is unfortunately the common causes of environmental degradation. The air pollution introduces to the contaminants into the environment that can maim or even kill to plant and animal species. According to Kay (1999), "Domestic smoke, industry and automobiles are the primary and secondary contributors to air pollution worldwide". Air pollution is result of emitting of several pollutants due to industries, automobiles and agricultural practices and it is a major environmental risk to human health. A reduction of air pollution is expected to reduce the global burden of disease from respiratory infections, heart disease and lung cancer. As air quality is a major concern for both developed and developing countries.

**Water Pollution**

Water is a necessary aspect of human as well as other living, but at present day, its quality is falling due to sewage water with pollutants and take a place of pollution level. Microbe contamination of groundwater due to sewage outfalls and high concentration of hazardous elements. Contact with unsafe drinking or bathing water can impose serious risks to human health. While tap water is subject to treatment and has required to meet details testing and purity standards. It is not always disinfected of diarrhea inducing micro organisms.. Furthermore, fecal coliforms are not prohibited in bottled water and sold within the same state is not subject to Food and Drug Administration standards. There is a large gap between generation and treatment of domestic waste water in the India.

India is recognized as having major issues with water pollution, predominately due to untreated sewerage. The Ganges and Yamuna rivers are flowing through highly populated areas and become polluted. Effluents

are another by-product of industries which poses threat to the environment, in which leather and tanning industries, petroleum industries and chemical manufacturing industries create major waste products and released direct and indirect into nearby streams without treatment, and creating river pollution and produced harmful situation for aquatic life. The responsible factor is a majority of the government-owned sewage treatment plants remain closed most of the time due to improper design or poor maintenance or lack of reliable electricity supply to operate the plants, together with absentee employees and poor management. According to a World Health Organization study, out of the India's 3,119 towns and cities, just 209 have partial sewage treatment facilities, and only 8 have full waste water treatment facilities. Over 100 Indian cities dump untreated sewage directly into the Ganges River.

**Solid Waste Pollution**

In highly densely populated, commercial and industrial zones produce heavy quantities of waste materials. Trash and garbage is a common sight in urban and rural areas of India. It is a major source of pollution. Indian cities alone generate more than 100 million tons of solid waste a year. Street corners are piled with trash, public places and sidewalks are despoiled with filth and litter, rivers and canals act as garbage dumps. In parts of India, garbage crisis is from rising consumption. India's waste problem also points to a stunning failure of governance. In 2000, The Supreme Court directed to all Indian cities regarding implement a comprehensive waste-management programme that would include household collection of segregated waste, recycling and composting. These directions have simply been ignored. No major city runs a comprehensive programme of the kind envisioned by the Supreme Court. Indeed, forget waste segregation and recycling directive of the India's Supreme Court, the Organization for Economic Cooperation and Development estimates that up to 40 percent of municipal waste in India remains simply uncollected. Even medical waste, theoretically controlled by stringent rules that require hospitals to operate incinerators, is routinely dumped with regular municipal garbage. Some of the few solid waste landfills India has, near its major cities, are overflowing and poorly managed. They have become significant sources of greenhouse emissions and breeding sites for disease vectors such as flies, mosquitoes, cockroaches, rats, and other pests. Along with waste-to-energy projects, some cities and towns in India, such as Pune (Maharashtra), Varanasi, Kanpur (U.P.) are introducing competition and the privatization of solid waste collection, street cleaning operations and bio-mining to dispose the waste. A scientific study suggests public private partnership is in Indian context more useful in solid waste management.

According to this study, government and municipal corporations of different metropolitan and a normal cities of India must encourage PPP-based local management through collection, transport and segregation and disposal of solid waste.

**Global Warming**

In the present globalization period, countries exploit and consume minerals as well as forest resources. Due to this process many type of hazardous contaminants emit and dissolve in air/atmosphere. In which many gases like CFC, CO<sub>2</sub>, Methane, Nitrous oxide, Fluorinated gases, Ethane etc. contribute to increasing temperature of the atmosphere. Due to the covering of CO<sub>2</sub> along with the partial or more parts of countries/continents have been warmed. So, we can say, that "The foremost evidence for worldwide climate change has been global warming." Evidence indicates that the Earth's climate system is warming in a way that has no precedent in the history of human civilization. The continuing temperature increase may break the balance of a human ecosystem that has been long established at a lower temperature. The latest report of the IPCC estimates a rise in the global average surface temperature from 1990 to 2100 of between 1.8° C and 4° C, although it could possibly be as high as 6.4° C. The sea level has risen between 1993 and 2003 at a rate of 3.1 millimeters per year due to melting

polar ice caps and seawater expansion and rainfall patterns have been changing with increased droughts in some areas and heavier rain in others regions. The glaciers and snow melting have been increasing water in rivers as well as reservoirs. On the other hand, the winds are increasing in power with heavy velocity and cyclones are shown to be increasing in frequency and oceanic temperatures may rise.

#### **Prevention of Environmental Degradation**

1. Must be human awareness regarding exploitation and consumption patterns.
2. Man should be planting trees in a mass level with a recyclic form.
3. Reduce our overall consumption of resources.
4. Every person, agencies, plants, governmental and NGOs bodies are adopting the RRR concept.
5. Greenies transportation means and modes.
6. Give back to the healthy environment.
7. Adopting resources conservation process in every phase and every way of development.
8. Treating the industrial effluents as well as sewage water before falling in rivers or ponds or reservoirs.
9. Industrial chimneys cover/lid should be necessary for every unit for emission smoke/fly ash/gases.
10. Reducing the uses of CFC.
11. Reducing or controlling the use of fertilizer and pesticides in agricultural practices.
12. Controlling population growth or minimizing family size.
13. Should be adopting systems of rainfall harvesting.

#### **Conclusion**

Finally, we can say that at present movements all over the globe, environmental issues are covered. The above factors and activities were found to be prominent in the environmental degradation. In a majority of the studies discussed above, we found that activities by the rich and powerful were the primary contributing factors forcing groups living at the margins into environmental degradation or pollution. Environmental degradation/deterioration poses a significant threat to human health on the globe. Harmful consequences of this degradation to human health are already being felt and could grow significantly worse over the coming future. Because environment and health are so intimately linked, so too should be environmental and health policies. It is an area of research which has had little empirical work done to date and offers the potential for substantial work in the future. Finally I express that every person should take oaths for adopting conservational aspects for making an environmental quality and to keep sustainable eco-development.

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