

# Reciprocated effect of Human Cause: Linkages of Human Health and Environmental Pollution

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**Abstract:** *Man is good but men are bad. This is a true statement except for the team work in social welfare. The Environmental degradation is also one of the victims of human overpopulation. The current study focuses on mystery epoch of environment due to human activities, titling 'Enigma Era of Anthropogenic on Environment'. Chapter one initiates with three basic questions. Chapter two enlists the review of literature. Chapter three analyzes answer for first question. Chapter four discusses with second question and Chapter five thrashes out with third question. The last chapter exposes the answer for all three questions.*

1. Why humans are blamed for environmental pollution?
2. How far environment is degraded?
3. What is the link between environment and human health?

**Key words:** Environment, Human, Health, Pollution, Degradation, global warming

## I. INTRODUCTION

Any nation is classified into three sectors namely Agriculture, Industry and Service Sector. All three sectors are to be optimized, as the demand from the human being is rapidly increasing. The primary driver behind many ecological and even societal threats is the rapid human population growth. The chain of action starts from the human over population, resulted in over consumption of goods and services. In order to make up the supply for the increasing demand, technology has been improved which is adverse to natural process of production and leads to a negative environmental impact. The law of thermodynamics rightly insists that the Technology induces a order in the human economy at the cost of level of disorder in the environment. The current study tries to expose the linkages between the human activities and environmental degradation and vice versa through answering three basic questions related to human-environment linkage.

1. Why humans are blamed for environmental pollution?
2. How far environment is degraded?
3. What is the linkage among Environment with Human Health?

## II. REVIEW OF LITERATURE

There are number of studies are conducted, relating to environmental degradation and climatic changes and biodiversity in eco system. Some of the studies have identified the anthropogenic climatic changes in the recent past.

Analyzed effect of human activities on changes in ecological changes in Environment and climatic transformation due to urbanization with reference to the Loess Plateau[1]. Excessive utilization of land and exposition of carbon dioxide trace elements are taken for consideration to analyse the level of environmental degradation. The twin elements of human activities result in temperature increase in climate and soil erosion and fertility depletion in Loess Plateau.

This study analyzed the impact of individual and societal activities on environmental degradation in terms of water perspective[2]. For this purpose, the sub regions of East Africa (Somali) and island states of Indian Ocean are considered. The study found that due to human activities, shortage of fresh water, solid waste pollution and climatic change have happened in the respective regions.

This study exposes the implication of human activities as anthropogenic climate change by correlating the land use change and its impact on ecosystem services and environment conducted in the seashore areas of Arabia(Saudi)[3]. It infers the level of human activities, deforestation, industrial revelation and increase in greenhouse gases are significantly correlating to each other. In their study, they inferred that the gestation period needed to suck up anthropogenic carbon-di-oxide (CO<sub>2</sub>) strappingly rely on full amount of emissions – for emission equal to fossil fuel reserves, it may take nearly 2000 years to absorb 50 percent of the carbon-di-oxide. The continuing climate retort appears to be independent of the level at which carbon-di-oxide is exposed over the next few centuries[4].

In their review article, Large-scale of increases in the temperature (heat) content of the biosphere oceans have been observed to happen over the last five decades[5]. The parallel as well as the sequential disposition of these climatic changes has been closely replicated by the state-of-the-art Parallel Climate Model (PCM) obligatory by pragmatic and predictable gases of anthropogenic. Due to repeated doses of heat content, it is compulsory to apply the climate model to retrieve the ocean environment.

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### III. HUMAN CAUSE

Human overpopulation, demands over consumption of goods and services which are extracted from over utilization of resources (both in agriculture and Industry) and application of technology. Due to rapid usage of agricultural activities, the fertility of land is depleted, the level of ground water is disturbed with over usage of irrigation facilities, soil erosion escalated, chemicals and other technology tools are immersed to reap abnormal agricultural produce, forestry areas are occupied with anthropogenic mode of biodiversity, as buffalos as the domestic serving cattle and availing wolves (dogs) as domestic pets animals, for human hypocrisy [6]. This leads to climatic change in the environment. The result of human agricultural activities are land fertility problem, water problem and deforestation.

Applying fertilizers and chemicals to land has increased the output of agricultural produce but land is polluted. Construction of Dams and Reservoirs has solved the irrigation problem but oceans and seas are polluted with lesser quantum of river water that leads to loss of marine resources (fisheries) [7]. Over extraction of agricultural sector resulted in changes ecological environment and socio-economic conditions. These incredible changes intricate the environmental degradation in terms of soil erosion, wind erosion, loss of ground water, loss of nutrients and organic matters, acidification, compaction, food industry (cattle slaughters, cleaning of meats and processing of leather, wrapping, storing and moving cattle and their products) and use of land for livestock etc., through the agricultural sector. In case of Industrial sector, mining industry, particularly coal mining and burning creates toxic air pollution, leather industry creates water pollution, nuclear power and electricity generation release radioactive wastes and radioisotopes adversely affects the living organism of the ecology system. The most pollutant industries of the environment are Chemical industry, Pharmaceutical industry wastages, paints, paper industry and pesticides. Further, the uses of plastic products are continuously increasing and the day will come that the physical content of plastic in the biosphere will be more than the human population. The Service sector is also equally competing with other two sectors in damaging the ecology system and polluting the environment. The lion share of Environmental degradation through service sector goes to Transportation. Use of petroleum creates air pollution, number of vehicles creates noise pollution, construction of road and other infrastructure facilities, emission of maximum carbon dioxide for global warming, transport electrification etc. are accounted for road transportation. Environmental impact of Aviation are with two kinds, noise pollution and global dim. Oil pollution, greenhouse gas emission, acidification etc., are from Marine Side.

### IV. EFFECT ON ENVIRONMENT

The human activities are causing environmental degradation. The depletion of resources, like air pollution, water pollution and land pollution etc., along with destruction of ecosystem are the symptoms of environmental degradation.

There are four factors which are responsible for the environmental degradation. In easy words, we can measure

the level of environmental degradation with these four factors. The level of environmental degradation is directly proportional to the growth of human population, global economic growth, level of technology and usage of natural resources. The development of Science and technology has improved the mankind but terribly affected the environment. The Environmental degradation effects can be expressed in so many ways. Some of the effects are discussed in the current study.

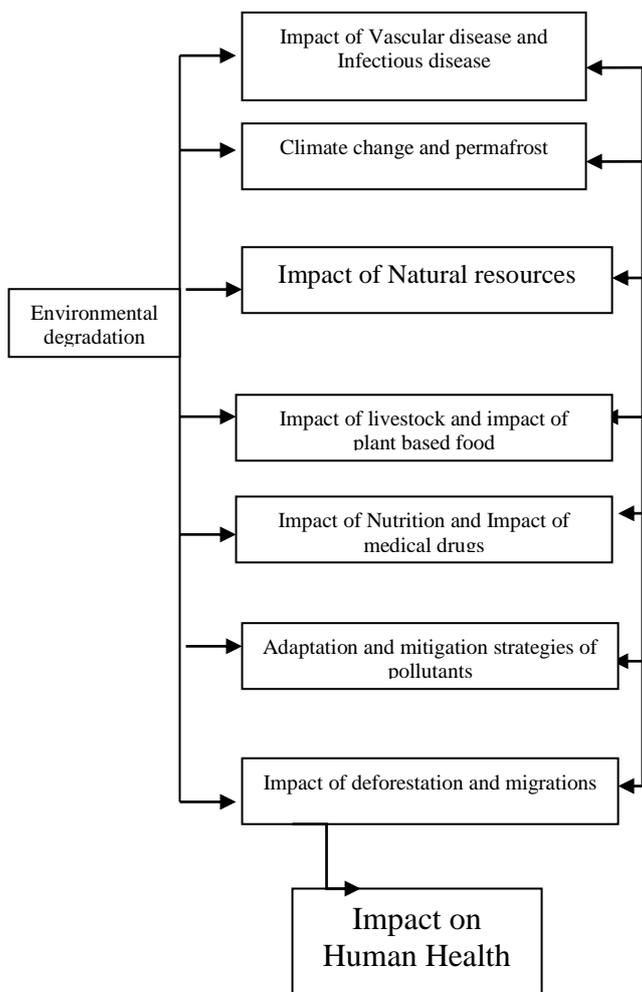
1. Over population
2. Over consumption
3. Mass extinction
4. Over use of natural resources
5. Bio-diversity effects
6. Defaunation – Loss of animals from ecological communities
7. Coral mining
8. Over fishing
9. Over emission of Carbon dioxide
10. Ocean acidification
11. Dust storms
12. Biological virus
13. Decline in amphibian population
14. Global warming
15. Ozone depletion

One of the research studies, from Proceedings of National Academy of Sciences of United States of America (PNAS), the journal of science has exposed the current status of eco-system. Nearly eighty three percent of wild mammals, Eighty percent of marine mammals, Fifty percent of plants and Fifteen percent of fish have been lost since the dawn of human civilization

### V. LINKAGES OF HUMAN HEALTH AND ENVIRONMENT POLLUTION

In the biosphere, human are the integral part of the Environment. Based on Newton's law, for every actions there will be equal and opposite reactions. When the human population starts degrading the environmental status, the environment in turn, will deteriorate the human health. When you pollute the air, the environment will pollute your lungs. When you pollute the land, environment will pollute your digestive system. When you pollute the water, environment will pollute your metabolism. When you over use the natural resources, environment will reduce your life expectancy. When you produce and use more chemical, environment will produce and allow cancer to you.

**Fig. 1 Backward Linkage of Environmental pollution to Human health**



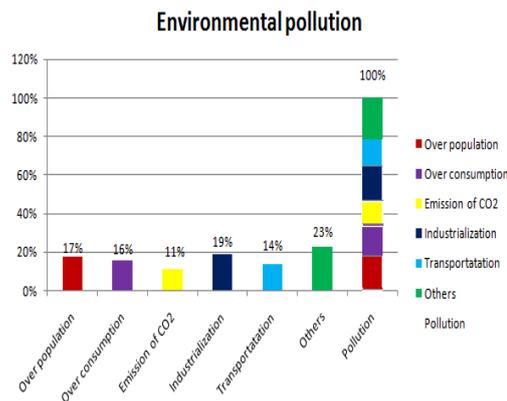
The ecosystem is balancing oxygen and carbon dioxide with living organisms and plants. It is unfortunate to express that the human beings are generating the carbon dioxide to the environment, through industrialization and transportation in turn polluting the human health. The earth's climate has always been changeable, but changes during last few decades humans might be partly to blame. Here the answer for these three questions throw light on what affects the climate and why humans are blamed for the environmental degradation and how it has been replicated with the human health.

**VI. Conclusion**

**a. Why humans are blamed for environmental pollution?**

The human activities right from over population, over consumption, exposition of more carbon dioxide, Industrialization, Transportation and making changes in biodiversities are the reasons for the environmental pollution.

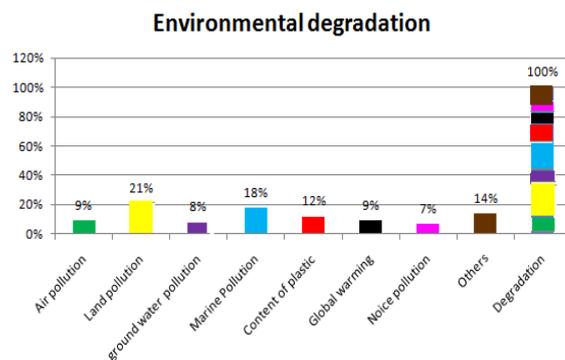
**Fig. 2 Contribution of human cause to environmental pollution (estimated by author)**



**b. How far environment is degraded?**

The impact of environmental pollution like, air pollution, soil erosion, water pollution, noise pollution, land pollution, marine pollution and global warming, marine acidification, physical content of plastic etc., are the elements of environmental degradation

**Fig. 3 Contribution of environmental effect on Human health (estimated by author)**

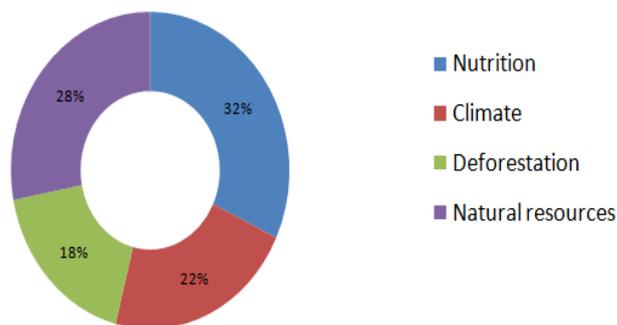


**c. What is the linkage between environments with human health?**

The link between environment and human health starts from Nutrition, Climate, deforestation and Level of Natural resources. Disproportion of these four will affect both environment and human health.

**Fig. 3Reciprocation Environmental Pollution and Human Health (estimated by author)**

**Impact of Disproportion affects human health**



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