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## Climate change and human and environmental health

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### Abstract

Climate change presents a fundamental threat to human health. It affects the physical environment as well as all aspects of both natural and human systems – including social and economic conditions and the functioning of health systems. It is therefore a threat multiplier, undermining and potentially reversing decades of health progress. As climatic conditions change, more frequent and intensifying weather and climate events are observed, including storms, extreme heat, floods, droughts and wildfires. These weather and climate hazards affect health both directly and indirectly, increasing the risk of deaths, noncommunicable diseases, the emergence and spread of infectious diseases, and health emergencies. Climate change affects the food we eat, the air we breathe, the water we drink, and the places that provide us with shelter. Climate change can also impact people's health and well-being by altering the frequency or intensity of extreme weather events and spread of certain pests and diseases. The interconnections between climate change and health are well studied.

However, there is a perceived need for studies that examine how responses to health hazards (e.g. cardiovascular diseases, ozone layer effects, allergens, mental health and vector-borne diseases) may assist in reducing their impacts. The purpose of this paper is to review the evidence on health responses to climate hazards and list some measures to address them.

**Keywords-** Climate change, Climate change affects, human, environmental health

### Introduction

Vasudhaiva Kutumbakam is a sanskrit phrase which means the “World is one family”. The statement is not just about peace and harmony among the societies in the world, but also about the truth that some how the whole world has to live together like family. It is the duty of every person to disseminate information regarding the cultural wisdom, contained within the pages of ancient scriptures so, that this wisdom can guide the present generation towards, addressing and pressing global problems. The industrial revolution marked a major turning point in Earth's ecology and human's relationship with their environment. The Industrial revolution dramatically changed every aspect of human life and life styles. World Development Report 2001 also focuses its concern primarily on the welfare of developing countries.

The most immediate environmental problems facing these countries are unsafe water, inadequate sanitation, soil depletion, indoor smoke from cooking fires and outdoor smoke from coal burning which are different from and more immediately life threatening than those associated with the affluence of rich countries, such as carbon dioxide emissions, depletion of stratospheric ozone, photochemical smogs, acid rain, and hazardous wastes, Industrial countries need to solve their own problems, but they also have a crucial role to play in helping to improve the environments of developing countries. First, developing countries need to have access to less-polluting technologies and to learn from the successes and failures of industrial countries environmental policies. Second, some of the benefits from environmental policies in developing countries are the protection of tropical forests and of biodiversity, accrue to rich countries, which ought therefore to bear an equivalent part of the costs.

Third, some of the potential problems facing developing countries are global warming and ozone depletion, in particular stem from high consumption levels in rich countries; thus, the burden of finding and implementing solutions should be on the rich countries. Fourth, the strong and growing evidence of the links between poverty reduction and environmental goals makes a compelling case for greater support for programs to reduce poverty and population growth. Fifth, the capacity of developing countries to enjoy sustained income growth will depend on industrial countries economic policies i.e. improved access to trade and capital markets, policies to increase saving and lower world interest rates, and policies that promote robust, environmentally responsible growth in industrial countries, will all help.

Policy reforms and institutional changes are required to bring about accelerated development and better environmental management and property. The health of a man is determined by the interplay and integration of the internal environment of man himself and the external environment that surrounds him. A disease is only due to a disturbance in the delicate balance between man and his environment. Now-a-days it is not only stacks or chimneys alone where soot is detected as a cause of cancer but carcinogens are found else where also in the environment where very potent cancer causing agents such as benzopyrene and many other polycyclic aromatic hydrocarbons are present in significant concentrations in air.

**Impact Of Air Pollution:-** A normal human being breathes about 25,000 times a day at a rate of about 1-2 liters of air per breath. About 25,000 to 50,000 liters/day about 30 to 60 kg of air per day. Thus the quantity of air consumed by an average man is about 25 times more by weight and 20,000 times more by volume than the quantity of water consumed. In addition, the air we breath interacts with the most sensitive organs of human body. Hence the air we breath must be of a very good quality. Unfortunately man is not equipped with household or portable air cleaning devices unlike water filters etc. and thus demands a clean ambient air for his health and well-being which is more than a luxury today.

Air that surrounds a man has a direct impact on his health and property. The health of a man is determined by the interplay and integration of the internal environment of man himself and Health is a fundamental human right and is the essence of life and is man's world-wide social goal. The signs of physical health of an individual are a good complexion, a clean skin, bright eyes, lustrous hair, a physique that is good looking neither too fat nor too lean, neither too tall nor too short, firm flesh, a sweet breath, a good appetite. Sound sleep, regular activities of bowels and bladder, smooth, flexible and coordinated bodily movements, normal functioning of different organs, special senses, normal pulse rate and normal blood pressure. Mental health may be defined as a state of balance between the individual and the surrounding world, a state of harmony between oneself and others, a co-existence between the materials of the self and that of their people, and that of the environment.

Man's health is easily affected by air pollution. The inhalation of gases and particulates through human respiratory system is a direct form of air pollution. The eye of human affected by air pollution. The sharpness of vision is reduced by excess carbonmonoxide. Smog. When present in considerable amount causes irritation to the eye. When gaseous or particulate materials contact the external coat of the eye and the internal mucous lining of the eyelid, the eye will be irritated. However to relieve this irritation, excessive rubbing will be done, which will cause physical damage. Some particulate materials combined with ozone, oxides of nitrogen, aromatic hydrocarbons and synthetic pollutants cause irritation.

The respiratory system is affected more than any other part of the human body because the basic functions of the respiratory system are to inhale air into the lungs, filter impurities from the inhaled air, supply oxygen contained in the circulatory system.

**Environment Degradation:-** Climate change refers to the change in the environmental conditions of the earth. This happens due to many internal and external factors. The climatic change has become a global concern over the last few decades. Besides, these climatic changes affect life on the earth in various ways.

These climatic changes are having various impacts on the ecosystem and ecology. Due to these changes, a number of species of plants and animals have gone extinct. Man due to his need and greed has done many activities that not only harm the environment but himself too.

India has been ranked at a low 155<sup>th</sup> position in a global list that places countries on how well they perform on high-priority environmental issues. The reason India is so vulnerable to climate change is because it is a large country with many living in poverty, inadequate infrastructure, and lack of government planning to deal with complex weather systems. India is subjected to irregular monsoons, flooding, rising sea levels, and higher temperatures. The monsoon season is vital to the Indian economy because many Indians are agrarian. What happens to India's monsoons will drastically affect the fate of the agricultural sector and the people dependant on it. Climate change is going to continue to create erratic extremes throughout the monsoon season. Preparation for weather irregularities brought about by climate change is thus essential to protect the lives of the Indian people and the growth of the Indian economy. In this era of rapid development, technological advances have overpowered one's lifestyle. With world facing the climacteric problem of population explosion, basic resources like water, food, fuel, land, wood etc. are to be supplied and consumed by the people. Also, rapidly increasing industrialization and urbanization requires a larger supply of land and wood for processions.

**Impact Of Deforestation:-** Since centuries, humans have relied on forest and lap of nature for their various needs. Many tribal groups also address forests, rivers and trees as deities and preserve a harmonious relationship between their community and nature.

However, to boost economic trade and commerce of forest and forest-derived products, over-exploitation of forested lands has been seen in past several years. They are disappearing at an alarming rate. Between the world lost 502,000 square miles (1.3 million square of forest, according to the World Bank an area larger than South Africa. Since humans started cutting down forests, 46 percent of trees have been felled, according to a 2015 study in the journal Nature, About 17 percent of the Amazonian rainforest has been destroyed over the past 50 years, and losses recently have been on the rise.

Recent cases of deforestation at Talabira forest areas for making way for coal mines along with forest fires in Australian continent have increased this problem and worsened it. kilometers)

Deforestation affects the people and animals where trees are cut, as well as the wider world. Some 250 million people living in forest and savannah areas depend on them for subsistence and income many of them among the world's rural poor. Eighty percent of Earth's land animals and plants live in forests, and deforestation threatens species including the orangutan, Sumatran tiger, and many species of birds. Removing trees deprives the forest of portions of its canopy. Which blocks the sun's rays during the day and retains heat at night. That disruption leads to more extreme temperature swings that can be harmful to plants and animals.

**Global Warming:-** Global warming is primarily a problem of too much carbon dioxide (CO<sub>2</sub>) in the atmosphere, which acts as a blanket, trapping heat and warming the planet. As we burn fossil fuels like coal,

oil and natural gas for energy or cut down and burn forests to create pastures and plantations, carbon accumulates and overloads our atmosphere. Certain waste management and agricultural practices aggravate the problem by releasing other potent global warming gases, such as methane and nitrous oxide. CO<sub>2</sub> survive in the atmosphere for a long time. It indicates that an increase in than 3.6°F above pre-industrial levels poses severe risks to systems and to human health .

Long-term rise in the average temperature measurements the Earth's climate system. It is major aspects of climate change Global warming is has been demonstrated by direct temperature by measurements of various effects of the warming. Effects of the global warming on human health, climate security, agricultural activities and other economies. Global warming has likely already increased global economic inequality and is projected to do so in the future. Regional impacts of climate change are now observable on all continents and across ocean regions. The impact of climate change on crop productivity for the four major crops was negative for wheat, maize and neutral for soy and rice. Climate change has been linked to an increase in violent conflict by amplifying poverty and economic shocks, which are well-documented drivers of these conflicts. Existing stresses include poverty, political conflicts, and ecosystem degradation.

**Conclusion:-** India has a prominent environmental heritage which can be attributable to its biodiversity. However industrial and economic development as well as indiscretions in the part of certain industries has had an adverse effect on the environment as well as a number of communities who are dependent on them. However, the Government of India has been a keen observer of the effects on the environment and has been in the forefront to help protect it and prevent further depletion of the valuable biodiversity of the country. During in this research we have elucidated in the paper the Courts have been successful in achieving this goal. It has used principles of international environmental law and constitutional provisions as tools for the furtherance of the cause of the environment. Court has also acknowledged the crucial link between environment as well. Thus it would not be inaccurate to conclude that the Courts law geared towards achieving holistic framework of environmental protection an obligation of the state and individual citizen The constitution, 42th amendment act of 1977 obligates the Government to protect and improve for the good of society as a whole. It states Law and regulations are a major tool in protecting the environment but It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures.

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