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## Environmental Air Pollution And Its Impacts Of Human Health: A Study Of North East India.

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### Abstract:

The terms “environment” is used in different senses. In broad sense, environment means everything external to an organism that affects it. Environmental pollution has direct as well as indirect effects on human health. The World Health organization in its report has emphasized that diseases can be prevented through healthy environment. WHO report that more than 33% of diseases in children below 5yrs. are due to Environmental exposures? Environmental pollutants can cause health problems like respiratory diseases, heart disease, and some types of cancer. People with low incomes are more likely to live in polluted areas and have unsafe drinking water. Anthropogenic air pollution is one of biggest public health hazards worldwide, given that it accounts for about 9 million deaths per year. So in this paper, researcher attempts to study how Environmental Air pollution impacts the human health problems basically of North East India.

**Key words:** Environmental, Pollution, Human health, Diseases and Income.

### Introduction:

Environment is derived from the French word Environner which means to encircle or surround. Thus environment is sum total of water, air and land. On the other hand pollution, having its origin in Latin word pollutionem (means to defile or make dirty). Environmental pollution is defined as the unfavorable alteration of our surroundings wholly as a byproduct of mans activities, through direct or indirect effects of changes in physical, chemical and biology characteristics of land, air or water that harmfully affect human life or any living thing. Pollution may be classified in different ways as follows. 1. According to the Source: It may be classified as **Natural** and **Artificial** or **manmade** pollution. The natural environment consists of four parts. These are Atmosphere, Hydrosphere, lithosphere & Biosphere. Air pollution is one of the most critical problems in the world now days accessed october5, 219. The air is polluted by various activities. Like food production, economic development has accelerated air pollutions. (Dherani M, at all 2008 May; 86(5); 390-398.) Basically air pollution is caused by smoke and dusts emitted from industries are vehicles' as various pollutants. The situation has reached such a point that some cities are covered in smoke. Air pollution mainly affects those living in large urban areas where road emissions contribute the most to the degradation of air

quality .there is also a danger go industrial accidents where the spread of a toxic fog can be fatal to populations of the surrounding areas. The dispersion of pollutants is determined by many parameters, most nobly atmospheric stability and wind.

#### Method and the study:

In the present study is made to proceed in to the entire investigation by taking by the field observation method. The researcher depends for collecting primary data from the selected geographical location in course of field study. For secondary data the researcher depends on the following sources. Collection of Secondary data has from Year wise publication Various Census report of India, Internet & Website.

#### Objectives of the study:

1. To indentify the various sources of Air pollution which affect the human day to day life.
2. To discuss the measures taken to controls of Air pollutions.

#### Results and Discussion:

Air pollution results from gaseous emissions from mainly industry, thermal power stations automobiles, domestic combustion etc. The human beings are affected by air pollution. The first effected system of our body is the respiratory system due to the synergistic effects of ozone (O<sub>3</sub>) and nitrogen oxide (NO<sub>x</sub>) causing chronic respiratory and cardiovascular diseases. The air pollutions may also alter after major body functions such as exchange of oxygen in the lungs and oxygen transports in the blood. In the urban area are polluted and people suffer from chronic effects. Some of the effects are given below table-

Most of the gaseous pollutants like sulfur dioxide (SO<sub>2</sub>), ozone (O<sub>2</sub>) and nitrogen oxide causing congestion, edema and even hemorrhage.

Below Table analysis the Air pollution effect on human health:

SL	Pollutant	Effect on Human Health
1	Sulfur dioxide	Bronchitis
2	Ozone	Inflammation which leads to lung fibrosis and failure of lungs
3	Carbon monoxide	Reduces the oxygen carrying capacity of blood and contribute to the heart disease
4	NO <sub>x</sub>	Impairs lung function and affect the immune system.
5	Particulate matter	Board spectrum of health ailments. Respiratory infections to heart disease.
7	Nitrogen oxides	They also cause eye irritation, respiratory troubles, blood congestion and dilation of arteries
8	Hydrocarbons	Hydrocarbons generally cause bronchial constriction, asthma, irritation of eyes.
9	Peroxyacyl nitrates (PAN)	Irritation of eyes and throat and produces respiratory troubles.

One of most important causes of Carbon dioxide content of the air is increasing due to deforestation and combustion in industries, automobiles and planes and is likely to become double by 2030. This increase is effecting the atmospheric composition and balance of gases, which are among the factors that controls earth climate, but increase of CO<sub>2</sub>, may cause rise in atmospheric temperature producing what is called greenhouse effect,(Paulson J & Perecky T.2017).

Now a day, the Urbanization is set to be quiet revolution in third world that has escaped the attention the most policy maker. With India's 36.36% of population living in urban areas, it is often said that India lives in its villages. Urbanization, no doubt has a positive impact on income levels, employment and production economics, but it has brought a number of problems such as shortage of housing, inadequate water supply, sanitation and waste disposal facilities, congestion, traffic problems, air, water, noise, vehicular and industrial pollution and in general, an unsafe social environment.

The overall quality of urban environment is deteriorating day to day with the largest cities reaching saturation points and unable to cope with the increasing pressure on their infrastructure, We known cities are as engines of economic growth. The urbanization means expansion of cities and migration of people from rural areas. It leads to increase in the development of houses, religious places, social and educational institutions which put pressure on the inputs. Construction of these building exploit the materials like wood, concretes, cement, bricks, iron etc. Wood production leads to deforestation that causes soil erosion and air pollution.

In the urbanization there is a vast development in industrialization. To meet the fundamental demands of increased population in the urban as, these industries over exploit the natural resources. Such industries also have been causing sever air pollution.

The Movement of Air pollution at world level:

The first global conference on the deletion of ozone layer was held in Vienna in 1985 the year, scientists discovered whole in South Pole. This was followed by Montreal Protocol in 1987 which called for a 50% cut in the use of CFCs by 1998. Many countries including India did not sign the Protocol, The three day international "Saving the ozone layer" conference was organized jointly in London in march 1989 by the British Govt. and the UNEP which resulted 37 more countries to support for the Montreal Protocol which was initially signed by 31 countries.

Air pollution is the big problem of present society. It is the need of the present day to make the social as well as legislative measures to protect the environment. Basically three types of steps can be taken to control air pollution, Separation of the pollutants from harmless gases, avoidance of pollutants, and conversion of pollutants to harmless materials.

Separation of the pollutants from harmless gases: This can be done by the following steps;

- i. Trees should be grown in all available places. This tree use CO<sub>2</sub> and release oxygen. This purifies the air for man and animals to breathe.
- ii. Sulphur free and lead free fuel should be used for motor vehicles. The exhaust gases from motor vehicles may be cleaned by use of catalytic converters.

Avoidance of Pollutants:

- i. Use of automobiles should be minimized.
- ii. Conventional fuels should be replaced by electricity or natural gas. These will not emit SO<sub>3</sub>.
- iii. Population should be brought under control.

Conversion of Pollutants: The conversation about pollution taken different aspects of environmental contamination. Its helps the reduce the ecological balance, preserve natural resources, and reduce the harmful effects of pollution.

Recent steps taken to reduce air pollution are;

The Supreme Court directed about 168 industries of Delhi including big industrial houses such as Birla Textile Mills, DCM silk Mills & Fertilizers etc. to those areas by Nov. 1997 which are less hazardous.

Government of India has made it compulsory for all new cars to be fitted with catalytic converters and stated that unleaded petrol will be available throughout the country by 2000 A.D.

Conclusion:

Air Pollution of the environment is one of the most leading environmental concerns which can cause human health problems. India, basically North East India faces a challenges the repaid growth of Air pollution in the cities as well as rural India. Environmental pollutants can cause health problems like respiratory diseases, heart disease, and some types of cancer. People with low incomes are more likely to live in polluted areas and have unsafe drinking water. Anthropogenic air pollution is one of biggest public health hazards worldwide, given that it accounts for about 9 million deaths per year. . The human beings are affected by air pollution. The first effected system of our body is the respiratory system due to the synergistic effects of ozone (O<sub>3</sub>) and nitrogen oxide (NO<sub>x</sub>) causing chronic respiratory and cardiovascular diseases. The air pollutions may also alter after major body functions such as exchange of oxygen in the lungs and oxygen transports in the blood. In the urban area are polluted and people suffer from chronic effects. Air pollution is the big problem of present society. It is the need of the present day to make the social as well as legislative measures to protect the environment.

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