

ENVIRONMENTAL POLLUTION: STRONG HAZARD

Chetna Muraniya
Research Scholar Department of Chemistry
SVN University Sagar (M.P)

ABSTRACT: Environmental pollution has been assuming a worldwide magnitude these days so much so that most of government all over world has set up their full-fledged Ministries. Environmental pollution is a great hazard we get its information almost every day through Media, scientific Journal, govt. documents etc. Environmental hazard may be defined as those extreme events either natural or man induced, which exceed the tolerance magnitude within or beyond certain time limits, make adjustment difficult, result in catastrophic losses of properties, income and lives. The environmental hazards, environmental stresses and environmental disasters are used in one way or the other to deal with the extreme events whether natural or man induced. Today it has created innumerable problems. In the ultimate analysis environmental pollution in the act of introduction by man, of extraneous substance or energy with the environment that in turn induces unfavorable changes. These changes affect man directly or indirectly by endangering his health, harming his living sources and ecosystem

KEYWORDS:- Pollution, Environment, Health, Industrialization

INTRODUCTION:-

The study of relationship between man and environment has always been, in one way or other a focal theme and, facets of man environment relationship has changed through time with the development of human society and the dimension of environment.

Environmental pollution causes health problems to man and animals, economic problem to property and natural's ecological problems to balanced ecosystem by interfering with the conservation of natural resources and threatening the very existence of some species, it also cause aesthetic problems by affecting human sense. Environmental pollution of air, water and soil in broadly classified into two categories (a) physical pollution and (b) chemical pollution. Presence of excessive radioactivity and electromagnetic radiations such as

noise, heat and light etc. are some physical pollutants. The chemical industries produce various hazardous, explosions, toxic, corrosion, flammable and pollute the environment. Contamination of air, water supply, land and animal life occurs by pollution. Areas may become uninhabitable for man and animal's Ecological system may be disrupted on a global scale.

Causes of Environmental Pollution-

Environmental deterioration by man in attributed to three major factors:-

- Over population,
- Urbanization and
- Industrialization.

The increasing amount of wastes generated there phenomena degrades the quality of land, water, air and ford.

Over population-

Human population on an average riser by about one million peoples every five days. Indian population is over 125 crores today and is increasing day by day. This increase demands more food, water and land. These three items are already man prepare on the limited agricultural land. India has 1/40th land surface while it supports 1/6th of world population. There is need for more land be devoted to cultivation generally the creation of new cultivable area in achieved only by converting the forest. Forests are the main savers of sinking carbon dioxide which protect flora and fauna from "global warming" effect. More than 3 million hectares of land has already been used by agriculture. These shows great forests are lost. Efforts are on grow more trust and shown deforestation any further. But this is not possible with the rising turned off population in the long run.

Continuously increasing population has led human race to exploit natural resources to support the community. Land and water have follow short of man's needs. This has resulted in dishwashing the natural biochemical cycles and created problem with conservation of natural

resources. Man has to produce more food than future to support this rising population.

Man has adopted synthetic biocides to overcome crop losses due to pests and plant diseases. Man further applies chemical fertilizer to boost the crop yield. One crop a year has given way to three crops instead. These efforts have no doubt resulted in increased yields on the one hand and soil degradation, nutrients depletion, water pollution by plant nutrients and contamination of environment with pesticides insecticides it on the other no doubt Indian agricultural production has doubled since independence. This has been made possible through technological advance, use of chemical fertilizers, seeds of high yielding varieties and improved farm practices. This in turn has contaminated air, water and food as the chemically find last shelter there.

Urbanization-

Growing population leads to greater concentration of people in these living areas, People move to urban area abandoning rural areas in search of employment, comfort and facilities. As a result towns become cities, cities become big cities and big cities become metro. These urban centers thus become over loaded with population that they can hardly support. A thickly populated area is the home of large number of vehicles, reservoirs, solid and liquid wastes with poor sanitary condition and various management problems. Owing to overcrowding cities have become more susceptible to pollution problems. The concentrations of air pollutants are more in urban atmosphere than in rural areas. Particulate matter in a city atmosphere comes from cooking fire, industrial activities, vehicular exhausts and dirt arising from transportation. This contamination of air with particulate leads to specific changes in the climate pattern of the city. The disposal of sewage and household wastes render the water resources dirty and contaminated.

Industrialization-

Human wants are unending, discovery of newer products and production of luxuries to suit the changing life styles are attained by rapid industrialization. It is also the key of economic development. Industries, during the processing or manufacturing of intermediate chemicals and final products generate huge waste materials and useless by products. This production and processing

results in the wastage of 1 to 10% of the quantity of parent chemicals. Chemicals also enter the environment through spoils during their use, transportation or disposal. Each industry is associated with an emission of one type of pollution or the other directly or indirectly. Not only are the industries responsible for pollution of air but also for the contamination of water. The quantity of water spent in producing every high thing in the world in this assumption is large. Every process of earth needs water, the universal solvent, industries consume a lot of it paper and pulp industry uses about 150 m³ of water for every tons of its product manufactured. The Indian industrial sector is ranked as tenth biggest in the world in gross industrial output. Pollution problems arising from industries in India are particularly because of their localization. More than 80% industries are concentrated in 10 or 12 big cities. Dispersal of industries may result in reduction of pollution to a certain extent.

Pollution can take many forms the air we breathe, the water we drink, the land where we grow our food etc. and noise we hear all the time. All contribute to health problems and a lower quality of life. Pollution in this becomes an undesirable change in the physical, biological, chemical characteristics of air, water and land that turns harmful to living beings. Pollutants are by products of man's action. Some of the pollutants may be as under:

1. **Deposited matter-** Soot, smoke, tar or dust or domestic waste
2. **Gases-** CO₂, nitrogen oxide, sulphur oxide, halogen (chlorine, bromine and iodine)
3. **Metal-** lead, zinc, iron, chromium
4. **Industrial Pollutants-** Benzene, ether, acetic acid etc and cyanide components
5. **Agricultural pollutants-** Pesticides, herbicides, fungicides and fertilizer
6. **Photo chemical pollutants-** Oxide of nitrogen, ozone, aldehydes, ethylene, photochemical smog and peroxy acetyl nitrate
7. **Radiation pollutants-** Radioactive Substances and radioactive fall out of the nuclear list.

On the basis of natural disposal, pollutants are of two types:-

1. Non degradable pollutants which degrade at a very slow pace such as salt, aluminum cons, D.D.T. etc.
2. Biodegradable pollutants which can be rapidly decomposed such as domestic sewage. These cause surviving problem when their of deposition executes the pace of decomposition

On the basis of the form in which they persuit after their relax into environment they are of two types:-

1. Primary pollutants emitted directly from identifiable sources such as sulphur compounds, carbon compounds, Nitrogen compounds, halogen compounds and particles of different sizes and substances found suspended in air.
2. Secondary pollutants produced by combination of primary emitted pollutants
3. Smog – fog deposited with smoke and chemical fumes a dark and thick covering.

Air Pollution-

Air pollution is the introduction of chemicals, particulates matter or biological materials that cause harm to living being and damage to natural environment sources of air pollution are many eg. Burning of fossil fuels, emission from automobiles, industrial activities, agricultural activities, wars etc. Besides these natural causes are also important e.g. gas emission from active volcanos, marsh gas, spores of fungi and pollens.

Pollution in India

Industrial pollutants, automobile exhausts, ionizing radiation from radioactive substances badly effect plants, men especially children. Some measures have been suggested to control pollution:-

1. Pollution control laws should be enforcing strictly.
2. Gases can be separated by dissolving in liquids.
3. Larges particles can be separate in gravity scattng tanks.
4. Height of chimneys should be increased.
5. Extracting sulphar from the fuel before use.
6. General awareness.

India's capital town Delhi is facing this great problem of air pollution and govt. have not been able to find any cure for it. In 2015, the air pollution is responsible for the death of 48651 people. Over 7.5 lakh people suffered from different illness on account of this problem over 1.2 lakh people were admitted in the emergency wards of varies hospitals. Besides all this deformity of body is increasing. Dr. Azad Kumar, Member. All India Indian Medicine Graduate Association claim that air pollution element pm 2.5 and pm 10 in turning a health hazard. This slow poison is growing to cause various illness and decrease human immunity system, and increase deformity of body. I.I.T., Bombay report published in "Environmental and Pollution Research Journal" has claimed that air pollution in creating negative effects of on human body and in responsible for increasing death rate. Deaths occurring in the period between 1995 year and 2018 have in covered 2.5 times in the past two decades. Various diseases like asthma, diabetes, brain problems, itching of eyes and skin, lungs etc. are on increase. American I.H.M.E. (Institute for Health matrices and Evaluation) has reported that research in 10 important countries (during years 1990-2015) shows that due to air pollution average age is decreasing. Distorts like paralysis, sterility, empathy etc. over increasing. In the year 2015 this condition was found 2900 among one lakh people. India stood there in this respect while Pakistan was first and Bangladesh second.

In Delhi 80 people die every day due to air pollution according to a statement in Rajyasabha by the them Central Environment Minster.

CONCLUSION:-

Effective management of environmental pollution and hazards requires knowledge of both physical environmental systems and the psychosocial processes affecting responses to environmental conditions. This general issue focuses on understanding individual and social group responses to environmental hazards. This paper suggests that hazard managers and others are often perplexed by the diversity of people's conclusions about environmental hazards because they adopt an objectivist perspective, which views risk only as a physical characteristic. We conclude that the effective management of many environmental hazards depends on reconciliation of the objectivist and constructivist perspectives. This can be accomplished by recognizing that risk communication, the exchange of information

and opinions about hazards, should integrate technical information about hazards with the interests and values of affected parties including the public, in order to develop common solutions to environmental problems.

REFERENCES:-

1. Fundamentals of Environmental Pollution, Krishnan Kanwar
2. Global Warming, Amit Kumar Water War, K.P. Singh
3. Hileman, B. 1983, Indoor air Pollution, Sci. Tech no. 17: 467 A.
4. Munn, R.E., 1973, Global Environmental monitoring system, action plan for phase 1, SCOPE 3, Secretariat, Royal Society, London
5. Subramanian, S, 1987, Environmental Geochemistry of Indian river basins.
6. WHO 1982, Estimating Human exposure to air pollutants, WHO, Geneva
7. Harvov, R, 1982, Toxic air pollutants, assessing their importance, Sci, Tot, Environ, 26:27.
8. Times of India, N. Delhi, Dec. 2016, Jan, Feb, 8 March, 2017
9. Hindustan Times N.Delhi, Dec. 2016, Jan, Feb, 2017
10. Janvani Dec 2016, Jan, Feb, April, 2017.
11. Dainik Jagran – Meerut, March, April, May 2017
12. Hindu N.Delhi, Jan., Feb., March, April, 2017
13. Robinson, D. and Kellow. A 2001, Globalization and Environment: Risk Assessments and the WTO, Edward Elgar, Cheltenham.
14. Sarvendra Singh, Environmental Geography, 2008.