



Major Source of Health Hazards :Environmental Pollution

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Abstract- Worlds one of the greatest challenge is environmental pollution. Man has ignored nature's law In his quest for wealth and comfort consequently disturbed a number of natural cycles resulting in environmental pollution and health risks . It has a hazardous effect on the natural world and on the activities of living beings and making things filthy .We will live on planet earth ,which is the only planet known to have an environment ,where air and water two are basic things that sustain life .Without air and water earth would be like the other planets -no man ,no animals ,no planet .It began since industrial revolution ,increasing day by day and causing irreparable damage to mother earth .On the basis of current experience and state of Knowledge ,the author presents own causes ,health risks,effects and remedies of environmental pollution in the paper.

Introduction- Any development is accompanied by environmental degradation. Environmental pollution consists of six basic types of pollution ,i.e air ,water land ,soil ,noise and light. When people think of environmental pollution ,most focus on fossil fuel and carbon emissions ,but there are different contributing factors..Chemical pollution in bodies of water contributes to illness .Electromagnetic pollution has effects on human health but is uncommonly considered in present times despite the fact we essentially expose ourselves to it on daily basis. Taking a look at causes and effects of environmental pollution will pull any mind on rapid downward spiral. Solutions are in the works and ,if we work together across the world ,there is hope remaining ,at least for the time being.

Causes of Environmental Pollution- Environmental pollution can be classified as Air Pollution, Water Pollution, Land Pollution, Radiation Pollution & Noise Pollution-

1.Air Pollution - "The World Health Organization defines air pollution as the presence of materials in the air that are harmful to man and his environment. Air as we know cannot be bound as compared to a source of water like a pond or a lake which can be isolated and checked.This results in the spread of pollutants over wide areas, sometimes even countries in different continents as was in the case of the Chernobyl accident in the U.S.S.R.

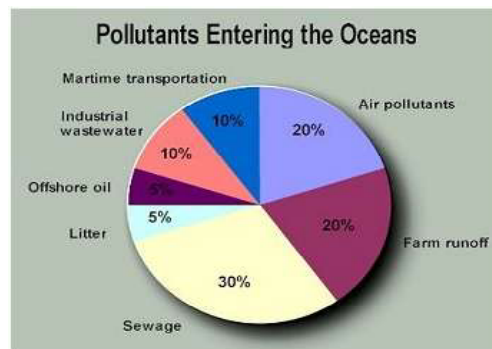
The sources of air pollution are: the Industrial pollutants released into the air from the chimneys of industrial units and power houses namely, sulphuric dioxide, carbon dioxide, carbon monoxide, hydrogen sulphide, chlorine, nitrous oxide, arsenic. Zone, ash and an endless number of metal particles and gases; domestic pollutants from fossil fuels burnt by man; automobile exhausts: and radiations.

2. Water Pollution -Water pollution is any chemical, physical or biological change in the quality of water that has a harmful effect on any living thing that drinks or uses or lives in it. When humans drink polluted water it often has serious effects on their health. Water pollution can also make water unsuited for the desired use. The water pollutants include domestic sewerage, industrial waste like caustic soda, miraculous oxide, lignite,



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sulphuric, cyanides, ammonia etc., and chemical inputs like fertilizers, pesticides and insecticides used for increasing agricultural productivity.



3.Land Pollution- Land pollution is the deposition of solid or liquid waste materials on land or underground in a manner that can contaminate the soil and groundwater, threaten public health, and cause unsightly conditions and nuisances. Increase of population in the urban areas due to industrialization has resulted in the disposal of wastes in vast land areas. Land is polluted by solid and liquid waste by the paper and pulp mills, oil refineries, power plants etc., fertilizers, pesticides, herbicides and insecticides used for increasing agricultural productivity also results in land pollution besides water pollution. Lack of civic sense on the part of human beings and lack of administrative checks result in land pollution.



4.Radiation Pollution- Radiation pollution is defined as the increase in the natural radiation levels caused by human activities. It is estimated that about 20% of radiation we are exposed to is due to human activities. The human activities that can release radiation involve activities with radioactive materials such as mining, handling and processing of radioactive materials, handling and storage of radioactive waste, as well as the use of radioactive reactions to generate energy (nuclear power plants), along with the use of radiation in medicine (e.g. X-rays) and research. But what about microwaves, cell phones, radio transmitters, wireless devices, computers, and other common commodities of today's life? The radiations emitted or leaked by the nuclear power plants and other nuclear installations result in contaminating the environment.



5.Noise Pollution- Noise pollution is generally defined as regular exposure to elevated sound levels that may lead to adverse effects in humans or other living organisms. According to the World Health Organization, sound levels less than 70 dB are not damaging to living organisms, regardless of how long or consistent the exposure is. Exposure for more than 8 hours to constant noise beyond





85 dB may be hazardous. If you work for 8 hours daily in close proximity to a busy road or highway, you are very likely exposed to traffic noise pollution around 85dB.

Health Hazards- Environmental Pollution leads to a number of health hazards as given below-

1.The Health Hazards Caused by Air Pollution- A number of gases for instance chlorine, sulphuric dioxide, hydrogen sulphide have a pungent odour and cause eye irritation, pulmonary congestion, bronchial problems etc. The chlorine gas which leaked from the Shri Ram Fertilizers in Delhi affected in the said manner. The methyl isocyanate which leaked, from the infamous Union Carbide's plant at Bhopal had resulted in a large number of deaths due to cyanide poisoning besides leading to irreplaceable loss of sight, muscular degradation, lung infection, still births, abortions and new burns with genetic disorders.

2. The Health Hazards Caused by The Water Pollution- The health hazards caused by the water pollution are-

Polluted water is the main cause of spread of the epidemic diseases like cholera, jaundice, dysentery, typhoid, gastroenteritis etc. In the urban areas, the slums are on the rise, they do not have a safe and separate drinking water sources. Human beings and domestic animals inhabit the place and use the same source for all their needs i.e. of drinking, bathing and washing. One easily recalls the large number of deaths that occur due to these epidemic diseases basically gastroenteritis in Delhi every year during the rainy season, water logs in these colonies and bacteria, virus and other parasites breed in that water.

3.The Health Hazards Due to Land Pollution -The health hazards due to land pollution are -Agricultural inputs result into the seeping of the same in the ground water. Some gases unable to find a way out of the surface of land escape from the wells and other such sources of water, and cause dizziness, irritation and death. One gas thus released is carbon monoxide which has been a cause of a number of deaths in Punjab and other northern states. The enormous number of insecticides and pesticides that are sprayed on the crops find their way into the human system and create disturbances with its functioning. Industrial units dump large quantity of ash on land, and this results in rendering the land useless for cultivation and cause diseases like cough, asthma etc.

4. The Health Hazards Due to Radiation Pollution: The radiations cause diseases like skin cancer, leukemia etc. It also induces mutations which change the genetic order and cause related diseases.

5.The Health Hazards Due to Noise Pollution- Endless noise produced by the industrial units and automobiles in the cities and towns sickens physically and mentally. Noise damages the ear drum even permanently if it is continuous and of a high intensity. It produces fatigue, headache, tension and nausea. Environmental pollution and health hazards are hand in glove with each other, to check them a number of efforts are required on the part of the administration and the citizens. More programmes like the Ganga Action Plan for cleaning the rivers are required to make our water and land sources less polluted. The industrial units that are located on the banks of these rivers should be allowed to run only with individual or organized scientific safeguards and release only the treated water into the rivers, which is not so in a majority of cases.

Effects of environmental pollution-

1.The polluting gases mentioned above have an interesting effect on climate. Essentially, these gases form a veil around the planet which holds heat in, increasing the overall temperature of the planet. The rise in planetary temperature, or global warming is not immediately noticeable. However, even a rise of a few degrees Centigrade causes catastrophic changes in weather.

2.Pollen has increased. It is ironic, but even with fewer trees in the world, the increase of carbon dioxide emissions induces plants such as ragweed and many trees to produce more pollen than ever before. This has resulted in rampant allergies across the world, affecting the health of billions of people.

3.One of the solutions to tamp out carbon monoxide emissions from coal burning power plants was and



still is to use radioactive power plants. While this does cut down on gas emissions significantly, there is radioactive waste which causes various cancers to bloom in major cities and small towns all around while destroying ecosystems entirely.

4. Global temperature has risen significantly over the years. The protective atmosphere is further being polluted by methane gas released from melting icecaps. This is causing rampant weather issues around the planet. This all seems like a fairly bleak outlook for the planet and all the creatures on it. It is in fact a load of dark and very real truth. For much of it, there is little turning back. Though solutions are in the works to combat global warming, the hope is dim. Radiation does not go away quickly either, especially in a technological age requiring more power, more gas, and intensified depletion of protective gases around the planet. We are on a significant downhill snowball ride to hell. There are things we can do. Let us take a look at some of the solutions which are currently being implemented to reduce pollution.

Solution to Environmental pollution- Following are the solutions to environmental pollution-

1. Gas emission pollution is being mitigated in a variety of ways with car emission control, electric and hybrid vehicles and public transportation systems. Not all major cities have successful implementation and decent public transportation in place, but the world is working on this issue constantly and we have managed to reduce emissions profoundly over the last decade. There is much catching up to do.

2. The cost of radioactive power plant is becoming apparent the days of coal power plants are nearly dead. The radiation is a serious issue. Radioactive leakage from power plants and nuclear testing have already contaminated oceanic life to such a degree that it will take hundreds of years to return to normal. More radiation solutions are in the works with various ecologically friendly power technologies being built everyday.

3. Solar power is fantastic solution. Now that solar radiation is at climatic peak, we can reap power from the sun using solar panel systems. These range from home systems to larger scale systems powering entire communities and cities.

4. Wind power is coming into play. This may not seem like much at first, but when you get about 100 feet off the ground, there is a great deal of wind up there. By building wind turbines to harvest natural wind energy, electricity is produced. Wind turbine power and solar power are both powerful forces against fossil fuel power and radioactive power. They want to stay with radioactive power plants because they actually can't be removed. It has become the crusades of many individuals and small corporations to make the switch and there are plenty of people following this as populations cry out for help.

5. **Electromagnetic radiation (ER) reuction** - Once major manufacturers of computers and electronic devices realized the blatant potential for huge ER emissions directly into the eyes and brains of users, they started to implement hardware protocols to minimize risks and reduce ER production significantly. Newer devices are in the lead to knock this problem out and, fortunately, this is working. Also the Environmental Protection Agency (EPA) is well aware of all leaks and tricks industries are using to dump wastes. This agency now has extremely strict protocols and testing procedures implemented against such facilities so populations are not affected. Additionally, the EPA is measuring air pollution and implementing regulatory procedures for vehicle emissions. They also monitor pollen issues and, with the help of the Centers for Disease Control (CDC), they implement solutions to reduce pollen in the air.

Conclusion- Presence of dangerous unnatural ingredients causing imbalance in the ecosystems and health hazards to human beings and animals is called pollution. Pollution is mainly found in air, water, soil, food and sound. Major human activities like industries, agriculture, health care, transport, dwelling and energy generation are the causes of pollution. Many industries like textile, paper, steel, sugar, petroleum, food, chemical and cement industries cause air pollution, water pollution and soil pollution. Industrial pollutants include gases like methane, cyanides, carbon tetrachloride, carbon disulphides, carbon monoxide, hydrogen



disulphides, hydrochloric acids, ammonia, sulphur dioxide as well as multiples of liquid / solid compounds. Modern agriculture - encouraging the large scale of fertilizers and pesticides - is primary cause of drinking water pollution. Transport has been the main reason for air pollution in most cities. Vehicular traffic releasing carbon monoxide, sulphur dioxide, nitrogen dioxide has caused large scale air pollution in cities. Pollution of air is the major cause human health problems such as respiratory problems, lung / throat, cancer etc. Pollution of water is also the main cause of health problems like gastro - enteritis formation of ulcers, tumors. Health problems due to pollution range from simple vomiting and skin irritations to intestinal cancer, brain tumors, from simple fever to fatal hepatitis, from throat irritation to deadly heart diseases. Foods that we eat are polluted because of use of pesticides, use of polluted water or microbial activities. Many persistent pesticides enter food chains and accumulate in bodies at a larger concentrations. Soil pollution by various solids and liquids has created imbalances in soil ecosystems besides creating number of ecological hazards in cities and villages. Control of pollution has been a formidable challenge to human civilization. As the pollution grows with the civilization and growing population, the control of pollution is more challenging. Several measures have been adopted, suggested imposed in industries, in agriculture and urban dwellings to control the pollution. However fast growing population and high capital requirement are the major problems being faced to implement the scientific methods of pollution control.

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