

# The Major Environmental Problems Related to Pollution

Dr. Renu Durgapal

Associate Professor, Department of Zoology, Government Ms Girls' College, Bikaner, Rajasthan, India

## ABSTRACT

Pollution, also called environmental pollution, is the addition of any substance (solid, liquid, or gas) or any form of energy (such as heat, sound, or radioactivity) into the environment at a rapid rate of diffusion, dilution, decomposed, recycled, or stored in a harmless form. Pollution can take many forms: the air we breathe, the water we drink, the soil we use to grow our food, the sparkling skies and even the noises we hear every day. , they can all contribute to health problems and may lead to low quality of life. Environmental pollution is one of the most serious global challenges. Wild-type organisms have a slow degradation rate of hazardous substances. Currently, advanced molecular biology tools along with conventional approaches allow us to rapidly degrade or deposit hazardous materials from the atmosphere. In a developing country like India, the use of environmental standards as a decision-making criterion should be properly evaluated. If the norms of developed countries apply in India, the cost would be much higher. Thus, the selected parameters should be suited to the economic condition of the country. *Pseudomonas fluorescens* and *Haemophiluspa* that were found in petrochemical waste disposal sites contaminated with phenanthrene, anthracene, fluorine, pyrene, and asenaphthene showed a 70%–100% drop in PAHs over 40 days.

**KEYWORDS:** pollution, environment, degradation, economic, hazards, countries, atmosphere

## INTRODUCTION

While plastics have many valuable uses, we have become accustomed to single-use or disposable plastics with serious environmental consequences. Worldwide, one million plastic drinking bottles are purchased every minute, while [2] 5 trillion single-use plastic bags are used around the world every year. Overall, half of all plastic produced is designed to be used only once – and then thrown away. Plastic waste is now in the natural environment.[1]

Harmful invasive species – which upset the balance of already fragile ecosystems – are second only to habitat loss in their [7] systematic threat to native wildlife. The National Wildlife Federation promotes the control, management and elimination of invasive species, as well as narrowing or closing routes for their spread. This includes the Asian carp, which is a major threat to wildlife in the Great Lakes ecosystem.[8]

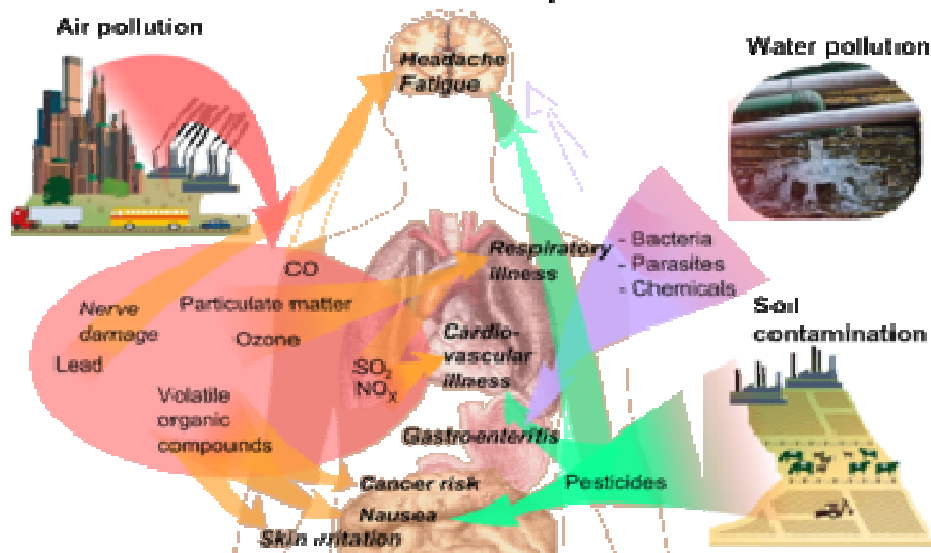
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## Health effects of pollution



### Health effects of pollution

Particulate matter (PM) refers to solid and liquid particles – soot, smoke, dust, and others – that are suspended in the air. When the air is polluted with PM, these particles enter the respiratory system along with the oxygen the body needs.[5]

When PM is injected into the nose or mouth, the fate of each particle depends on its size: the finer the particles, the farther they penetrate the body.[6]

Rivers and lakes are heavily affected by pollution, particularly by excess nutrients from the use of fertilizers in agriculture, which is one of the most widespread water quality issues globally, interfering with many human water uses. and causes major changes in species. Loss of ecosystem and biodiversity.[4]



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### Agriculture pollution

Species-rich wild forests are being destroyed, especially in the tropics, often to make way for animal husbandry, soybean or palm oil plantations, or other agricultural monocultures.[3]

Today, about 30 percent of the planet's land area is covered by forests – almost half that since agriculture began about 11,000 years ago. About 7.3 million hectares (18 million acres) of forest are destroyed every year, mostly in the tropics.[9]

### OBSERVATIONS

Last month, before the general spike in winters, the Delhi administration launched an anti-pollution drive. But to win, not less than continuous action will suffice several fronts. Other Asian capitals have also faced pollution woes. But Delhi peaks due to a combination of smoke from thermal plants and brick kilns in the capital region.

According to the report – led by the Food and Agriculture Organization of the United Nations (FAO) and the Water, Land and Ecosystems (WLE) program at the International Water Management Institute – the explosion in demand for food with a high environmental footprint, such as meat from industrial farms, Sustainable agriculture is contributing to the intensification and degradation of water quality.[10]



### **Plastic pollution**

This increase in crop production has been achieved mainly through the intensive use of inputs such as pesticides and chemical fertilizers.[11]

During 2040, improved air quality would avoid the bulk of the current 3-9 million cases of premature deaths annually. At the same time, measures that provide clean air will also significantly reduce emissions of greenhouse gases and contribute to the UN's Sustainable Development Goals.[12]

According to CPCB, it is possible to convert existing Pressure Swing Adsorption (PSA) based nitrogen plants to produce oxygen by replacing Carbon Molecular Sieve (CMS) used production of nitrogen with Zeolite Molecular Sieve (ZMS) and few other changes such as oxygen analysers, control panel system, flow valves etc. existing nitrogen plants can be modified to produce oxygen. With the availability of ZMS, such modified plant can be set-up in 4-5 days while installation of new oxygen plant may take minimum 3-4 weeks. M/s UPL initiated the conversion and commissioned 1st plant at L G Rotary Hospital, Vapi, which was made operational since 27/04/2021.[13]

### **DISCUSSIONS**

The purpose of textile dyeing and printing is to emphasize the current pollution situation in the dyeing and printing industries of Bangladesh due to various textile pollutants. Although the economy of our country is growing day by day due to medium and small scale industrial activities, toxic waste discharge by this dyeing and printing industry is contributing to serious pollution to the environment.[14]

Climate change, or global warming, is the greatest environmental threat we have ever faced. How we respond to this crisis will have a huge impact on present and future generations and all other species.[15]

The global carbon dioxide equivalent of greenhouse gases (GHG) in the atmosphere has exceeded 400 parts per million (Climate.gov).[16]



**Global warming**





### Air pollution

All motor vehicles release pollutants into the air, mostly through exhaust fumes that come out of the tailpipes during engine operation.[17]

Did you know this:

More than 99.4% of all pollutant gases are invisible[3]

Your car emits emissions even when it is stationary

Petrol and other fumes from lubricants evaporate into the air.

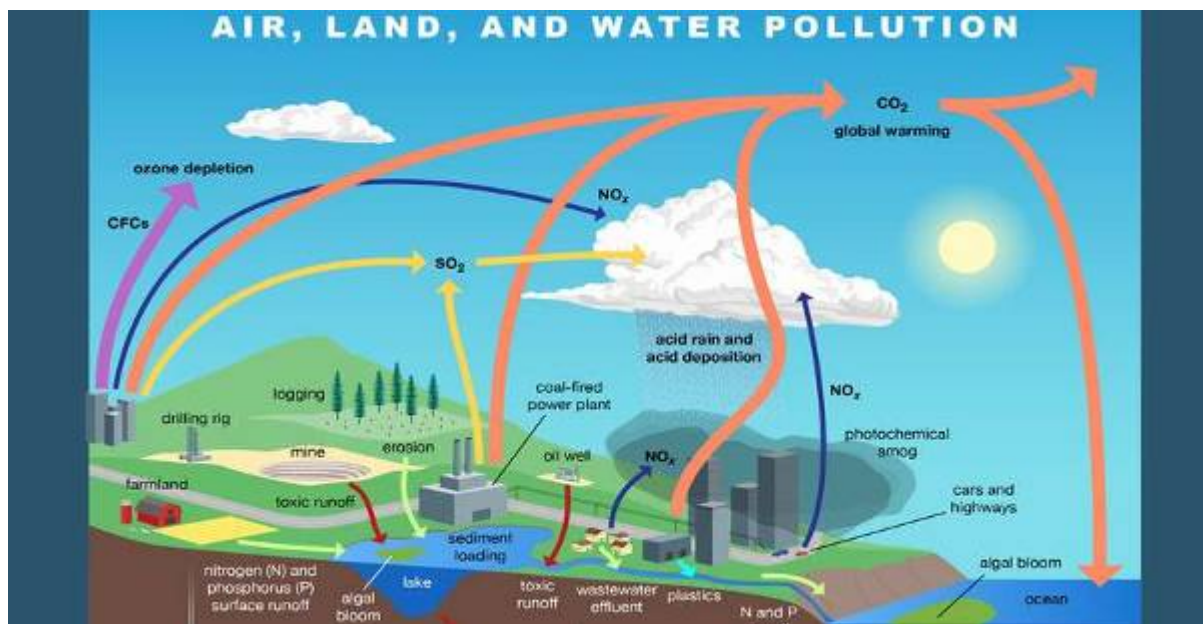
Pollutants from vehicles include carbon monoxide, hydrocarbons, nitrogen oxides, particulates, volatile organic compounds and sulfur dioxide.

Water is a natural resource that is needed by all living beings. Clean water is also used for manufacturing and for social and economic development.

However, according to the United Nations (UN), 2.2 billion people do not have access to safe drinking water services.[4]

The United Nations and the World Health Organization (Methyl) list the following statistics on reliable source water pollution:

More than half of the global population does not have access to safely managed sanitation services.



## RESULTS

Environmental pollution solutions

Gas emissions pollution is being reduced in a number of ways with car emissions controls, electric and hybrid vehicles and public transportation systems. Not all major cities have successful implementation and decent public transport, but the world is constantly working on this issue and we have managed to reduce emissions profoundly over the past decade, lots to do.



### Water pollution

The cost of radioactive power plants is becoming apparent and the days of coal power plants are almost dead. Radiation is a serious issue. Radioactive leaks from power plants and nuclear testing have already contaminated marine life to such an extent that it will take hundreds of years to return to normal. With the creation of various ecologically friendly power technologies every day more radiation solutions are in the works.

Solar energy is a great solution. Now that solar radiation is at its peak, we can get power from the sun by using solar panel systems. These range from household systems to large-scale systems that power entire communities and cities.[5]

Wind power is coming into play. It may not seem like much at first, but when you get to about 100 feet off the ground, there's a great deal of wind. Electricity is produced by building wind turbines to store natural wind energy. Wind turbine power and solar power are both powerful forces against fossil fuel power and radioactive power. There is a problem here with the power companies.[9]

Electromagnetic radiation (ER) reduction. Once major manufacturers of computer and electronic equipment realized the apparent potential of large ER emissions directly into the eyes and brains of users, they began to implement hardware protocols to reduce exposure and significantly reduce ER production. Gave. New tools are on the way to address this problem and luckily, it's working.



**Radioactive pollution**



## CONCLUSION

Furthermore, the Environmental Protection Agency (EPA) is well aware of all the leaks and tricks that industries are using to dump waste. This agency now has extremely strict protocols and testing procedures in place against such facilities so that the population is not affected.

Reducing pollen counts is a major focus for EPA and CDC activities. Asthma and other allergic conditions are flooding medical care facilities and pharmaceutical companies with serious public health problems. The response has been swift and various methods are being worked out to control emissions and reduce pollen counts.[11]

As the plastic slowly breaks down, microplastics are formed. These are small pieces of plastic that are less than 5 millimeters in size. Fish can consume these microplastics, which can then be consumed by humans.[15]



**Microplastics**

The United Nations says that plastic debris in the ocean causes the death of more than a million sea birds every year. Plastic debris is also responsible for the deaths of over 100,000 marine mammals annually.[16]

But on November 17, 2017, in an affidavit filed in the Supreme Court of India, the Ministry of Environment, Forest and Climate Change (MoEFCC) held that the deadline was not feasible. India generates 80% of its electricity from coal, and electricity is an "essential commodity and there is a need to ensure uninterrupted power supply in the country at all times, therefore, multiple units cannot be taken out for retrofitting at the same time". and it has to be done in stages.[18]

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