Environmental Pollution

 Abstract

Environmental pollution is anything that causes harm to the environment. Pollution is any undesired alteration of the environment and is often caused by human activities such as improper waste disposal, industrial emissions, and vehicular exhaust. Types of pollution include air, water, and soil. Many pollutants such as heavy metals and industrial waste products are hazardous to humans, animals, and plants and destroy aquatic life. Soil pollution affects soil fertility and agricultural productivity impacting food security. Contaminated water and food can lead to waterborne diseases, poisoning, and chronic health illness that may lead to death. Implementing sustainable solutions such as the role of clean energy adoption, improved waste management, and sustainable agriculture practices helps to mitigate environmental pollution.

 Introduction

Pollution is the influence of contaminants into the atmosphere that causes disorder, harm, or discomfort in the environment. There are two types of pollution natural and man-made. Natural pollution occurs naturally and won’t cause excessive harm to our lives due to its regeneration ability. While man-made pollution is caused by human activities such as deforestation and is hard to get rid of. Pollution takes place when harmful materials called (pollutants) are introduced into the environment. Environmental pollution is the addition of contaminated substances in the environment that cause harm or change to the natural composition of the environment. These variables are water, soil, air, noise, and light.

 Air pollution is caused by gaseous particles and particulates (dust, soot) in the atmosphere. Products from industrial reactions at high temperatures and pressure from exhaust pipes of vehicles produce dangerous gases such as carbon dioxide and methane. Sulfur dioxide is produced by the combustion of fossil fuels, industrial processes, agriculture, and deforestation destroys the quality of the air we breathe leading to respiratory diseases and long-term health issues.

 Water pollution is the addition of polluting gaseous, liquid, and solid that alter the composition of water sources. Industrial discharge and improperly treated sewage are the main causes of water pollution that contain millions of disease-carrying pathogens and unwanted nutrients. They may lead to waterborne diseases and cause harm to aquatic animals. Due to the continuous discharge of high levels of pollutants from Haryana (India), the ammonia level in River Yamuna has increased and water production has been decreased from water treatment plants at Okhla.

 Soil pollution involves the unwanted chemicals in the soils that cause them to be less fertile. The overuse of fertilizers, urbanization, and pesticides can poison soils and be a threat to soil fertility. Accumulation of non-biodegradable materials such as excessive use of plastics. The National Association for the Conservation of Nature (ANCON) reported that the majority of people in Panama City, beaches, and rivers are contaminated with plastic due to a lack of awareness for waste management which causes a major problem among the fishermen and wildlife. The government has come up with a solution to eliminate plastic such as redesigning products for enhanced sustainability and recycling of plastic items when used.

 History of Environmental Pollution

In early human history, the energy and other resources increased in demand of nomadic hunter-gatherers were small, the use of fire and the desire to try other foods may have altered the natural composition of plant and animal communities. Archaeologists suggested that the first civilizations came from Sumer in Southern Mesopotamia and Egypt. The surplus of storable food produced allowed the population to settle in one place instead of migrating in search of wild foods and grazing land. These led to population increase and deforestation that led to flooding and over-irrigation that led to soil infertility, which raised soil concentration.

 In March 2009 an international team of leading scientists issued a statement declaring that the climate system has changed beyond the patterns of natural variability within our society and economy. These changes include global temperature, sea-level rise, ocean acidification, and extreme climatic change. In 2009 the Environmental Protection Agency in the USA declared that greenhouse gases endanger public health and threaten food. Advancing technology now provides the means to achieve the transition of economies, water, waste management, and food production using methods of systems ecology and industrial ecology.

A Thorough Analysis and Review of Environmental Pollution

Environmental pollution refers to changes in our environment that are harmful to living organisms and can take many forms such as chemical substances or energy, including noise, heat, or light. With increasing industrialization and urbanization pollution has become an issue of global concern. The effects of pollution are diverse affecting not only our health but also threatening ecological balance but also contributing to climate change. Understanding the nature, causes, and impacts of pollution can help in effective strategies.

 Around 2.4 billion people worldwide cook using open fires or stoves that use kerosene, wood, and coal which generates harmful air pollution that causes premature death, and non-communicable diseases. Women and children bear the greatest health burden from the use of polluting fuels due to them being exposed to harmful smoke when they are doing household chores. Guidelines for indoor air quality and Household Fuel combustion such as biogas, natural gas, and biomass stoves that are safe to use and eco-friendly.

 Noise pollution is the exposure to high levels of noise, especially in urban areas leading to sleep disruption, hearing loss, and heart disease. Noise pollution also poses threats to wildlife, especially species that rely on sound for communication and navigation. There are a few solutions that are implemented to curb noise pollution such as noise barriers, urban planning, and noise regulations. Governments are trying to establish and enforce environmental laws and regulations to control pollution. They are trying to invest in technologies that can help monitor or prevent pollution such as air and water. Implementing responsible waste management practices such as recycling and proper disposal of waste production. Planting trees is another solution to prevent soil erosion, flooding, drought, and deforestation.

 Trees for Homes is an initiative in South Africa that promotes the value of planting trees to help with climate change and also encourage sustainable development. More than one million trees have been planted they also train communities in planting trees and also teach them how to maintain and care for them. By addressing, implementing strict rules, and adopting cleaner technologies we can mitigate the effects of pollution and protect the environment for the future to come.

 Conclusion

Environmental pollution is a global issue that demands attention and action. Addressing pollution requires prolonged solutions such as the transition to clean energy sources and technological innovations. Individuals, government, and industries all share responsibility for mitigating pollution. Pollution is a global challenge that requires strict rules and regulations to help, maintain, and prevent it to a healthier and more sustainable world.

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