



AN OVERVIEW OF ENVIRONMENTAL CHALLENGES IN INDIA

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ABSTRACT As a Developing Country India is becoming more crowded, more consuming and more sustainable. Man is using the natural resources recklessly to meet his needs. As a developing Country India is focusing on rapid growth which is to some extent creating many Environmental issues, which are addressed in this study. Issues like threat to bio diversity, desertification threat to wetlands, siltation and eutrophication, solid waste, air pollution, water pollution, are analysed in the present study. This is the need of the hour to address the environmental issues to create environmental consciousness. In this study the basic aspects of environmental issues, causes, effects are discussed. The different-law, policies and solutions are also discussed in brief.

KEYWORDS : Environmental Issues, biodiversity, eutrophication.

INTRODUCTION

Earth is the only planet where life exists. This became possible due to availability of water and atmosphere on earth. By the time population increased rapidly, economy shifted from agriculture to industrialization and it triggered urbanization with the development of science and technology man exploited all the natural resources recklessly to fulfil the needs. This phenomena led to many environment issues in all over the world. India has recently emerged as the most populous country of the world. With such a big population, it becomes urgent to develop fast in order to provide food, shelter, education and health facilities to the citizens. As a result India has focused on a more rapid growth and this has caused many environmental issues in India. Some of the biggest environmental challenges that India is facing are air pollution, water pollution, desertification, threat biodiversity, threat to wetlands, eutrophication and many more.

Database and Research Methodology

Methodology is central part to any research work which helps in scientific description and explanation of reality. In the current study Secondary data has been used by the author and simple percentage, mean and other stastical techniques has been used.

Different Environmental Issues of India

The environmental issues faced by India presently are many. Air pollution is one of them. Air pollution occurs when undesirable elements in the form of gases, dust, smoke enters into the air.

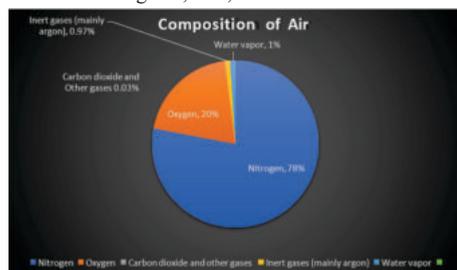


Figure 1

In the Figure ideal composition of air is shown .Most common gases are nitrogen(78%) Oxygen (21%) and Carbon dioxide (Co₂) 0.03% .Air also contains some other gases like helium (He), Neon (Ne), Krypton (Kr) dust, and water vapors. But this composition is disturbed due to some undesirable substances called pollutants.

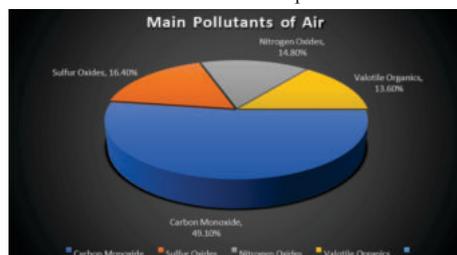


Figure 2

The figure Shows main air pollutants. The Source of these pollutants are emissions by industries, transportation, disposal of solid waste etc. The effects of air pollution are severe. According to National Institute of Environmental Health Science (2018) 13 of the World's 20 Cities with the highest annual levels of air pollution are in India. Severe air pollution causes diseases like asthma, lung cancer and heart attack. According to Delhi heart and lung institute over two million Children have abnormalities in their lung functions.

Another major issue is water pollution. The main causes of water pollution are industrial waste, chemical fertilisers and pesticides, accidental oil leakage, from sewer lines etc. Contaminated water causes cholera, Typhoid, Diarhera, Jaundice and some other deadly diseases. Some 8 lac people are estimated to die each year from diarhera as a result of unsafe drinking water, (According to W.H.O Report)

Another Major issue is threat to wetlands. Wetlands, loss may be defined as "the loss of wetland area as a result of human activity". It has been estimated that nearly one hectare of the world's wetlands is getting degraded at the tick of every minute of the clock. The Directory of Indian Wetlands published by the World wide fund for Nature India and Asian wetlands Bureau records 147 wetlands sites. About 32% of these sites were lost through hunting and associated disturbances, while 22% lost to human settlements 19% to fishing and associated disturbances and 23% through drainage for agriculture.

Increased urbanization and unplanned development in urban areas and Agricultural intensification and the increased use of chemical fertilizers have resulted in negative impacts on the water quality with in rural wetlands. For instance, most of the Gangetic floodplain are in advanced stage of eutrophication due to the discharge of untreated sewage as well as runoff from agriculture fields. A survey conducted by WWF-IUCN covering some of important wetlands in India identified wildlife poaching (38%) pollution (37%) grazing pressure, alteration to other land uses, over fishing and siltation as some of the major threats. The loss or degradation of wetlands can lead to serious consequences including increased flooding, species decline or extinction and decline in water quality.

Another Major issue is related to water bodies is Eutrophication. Eutrophication can be defined as the process by which a body of water become enriched in dissolved nutrients that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen. The absence of oxygen reduces biodiversity causing death of animal and plant species. The major causes of Eutrophication using nitrate and phosphate fertilizers, direct sewage discharge and industrial waste into the water bodies, malpractice of aquiculture. Threat to the survival of fish and aquatic life forms, deterioration of water quality, poisoning and impact on human health are some severe effects of Eutrophication.

Another major environmental issue that India is facing is threat to biodiversity. Among the biologically rich nations India stands among the top 10 or 15 countries for its great variety of plants and animals. India has 350 different mammals, 1200 species of birds, 453 species of reptiles and 45,000 plant species. These are 25 hot spots of biodiversity on a global level out of which two are present in India namely Eastern Himalayas and western Ghats. But now this biodiversity is facing

challenges in the form of human activities and loss of habitat, deforestation, desertification, climate change, poaching. Due to these reasons many plants and animals species in the country are in danger i.e tiger, elephant, rhino etc. There are also endangered bird species such as the Siberian crane, The Great Indian bustard. If the threats to biodiversity continues man will have to pay in many ways as the loss of the sources of food, fiber, fuel and balanced ecosystem process.

The Next Major issue is solid waste. Solid waste refers to the range of garbage arising from animal and human activities that are discarded as unwanted and useless. Many reports suggest that 62 million tons of Waste is generated annually in the country at present. Out of which 5.6 million tons is plastic waste, hazardous waste generation is 7.90 million tons and 15 lakh tons is e-waste. Due to improper waste disposal systems Wastes heap up and become a problem. Improper dumping of waste materials forces biodegradable materials to rot and decompose under improper unhygienic and uncontrolled conditions. It can cause ground water and air pollution and many kind of diseases.

Law and Policies:- India is the first country in the world to have provisions for the protection and conservation in its constitution. The provisions for environmental protection in the constitution were made after the "U.N. Conference on Human Environment held in Stockholm on 5th June 1972." The provisions were made through 42nd amendment of the Constitution 1976. Article 48-A, 51A(g) were added with this amendment.

The Environment (Protection) Act 1986

This act aimed to protect and improve the quality of environment by Central Government with coordination of the State Government. This act was amended in 1994 to include Environmental Impact Assessment (EIA) of various development projects.

The Water (Prevention and Control of Pollution) Act 1974 (Amended 1988) :- The water Act was enacted under article 252(1) of the constitution to prevent and control water pollution.

Similarly The Air (Prevention and control of Pollution) Act 1981 (Amended 1987) and wildlife (Protection) Act 1972 (Amended 1991), Forest Conservation Act 1980 (Amended 1988) were enacted to conserve and protect the environment.

CONCLUSION

The effects of different environmental issues are severe and have created a Challenge to the existence of human itself. Governments are seeking solutions in the laws and policies and indeed they are needed but there is no use of laws and policies unless and until environmental awareness is not Created. It is the need of the hour that man shift his focus from development to sustainable development. living in harmony with nature has always been emphasized in our culture. We need to take forward this legacy to our forth coming generations to make this world a better place to live in.

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