

Saarth

E-Journal of Research

ISSN NO: 2395-339X

“A STUDY ON ENVIRONMENTAL PROBLEMS AND REMEDIES IN INDIA”

Mr. Yogeshkumar J. Mistry*

1. Introduction

There are many environmental problems in India. Air pollution, water pollution, noise pollution, garbage, land pollution, and pollution of the natural environment are all challenges for India. The situation was worse between 1947 through 1995. According to data collection and environment assessment studies of World Bank experts, between 1995 through 2010, India has made one of the fastest progresses in the world, in addressing its environmental issues and improving its environmental quality. Still, India has a long way to go to reach environmental quality similar to those enjoyed in developed economies. Pollution remains a major challenge and opportunity for India. Environmental problems are one of the primary causes of disease, health issues and long term livelihood impact for India.

2. Meaning of Environment

Environment means everything around to a living being. Especially the circumstances of life of people or society in their life conditions. It comprises the set of natural, social and cultural values existing in a place and at a particular time, that influence in the life of the human being and in the generations to come. The word "Environment" is most commonly used to describe "natural" environment and means the sum of all living and non-living things that surround an organism, or group of organisms.

3. The Main Environmental Problems in India

The fast growing population and economic development is primary to a number of environmental problems in India. It is expected that the country's population will increase to about 1.26 billion by the year 2016. Main Environmental issues are Forest and Agricultural land degradation. Main environmental problems are forest and agricultural degradation of land, resource depletion (such as water, mineral, forest, sand, and rocks etc). Environmental degradation, public health, loss of biodiversity. Livelihood safety for the poor. Population The four basic demographic factors of births, deaths, migration and immigration produce changes in population size, composition, distribution and these changes raise a number of important questions of cause and effect. Population growth and economic development are contributing too a lot of serious environmental calamities in India. These include heavy pressure on land degradation, forests, habitation destruction and loss of biodiversity. Changing consumption model has led to rising demand for energy. The ultimate outcomes of this are air pollution, global warming, climate change, water scarcity and water pollution etc.

*Mr. Yogeshkumar J. Mistry , Asst. Prof., Govt Arts & Com College, Khergam, Dist: Navsari

Saarth

E-Journal of Research

ISSN NO: 2395-339X

4. Agricultural land and Forest degradation

Agricultural land and forest degradation. An estimated 60% of cultivated land suffers from soil corrosion, water sorting, and salinity. It is also expected that between 4.7 and 12 billion tons of topsoil are lost annually from soil corrosion. Overexploitation of groundwater is problematic in the states of Haryana, Punjab, Uttar Pradesh, Bihar Orissa, Gujarat and Maharashtra. Forest area covers 18.34% of India's geographic area (637000 km²). Almost half of the country's forest cover up is found in the state of Madhya Pradesh (20.7%) and the seven sister states of the northeast (25.7%); the latter is experiencing net forest loss. Forest cover is declining because of harvesting for fuel wood and the expansion of agricultural land. These trends, combined with increasing industrial and motor vehicle pollution output, have led to atmospheric temperature increases, shifting rainfall patterns.

5. Pollution:

5.1 Water Pollution

India has most important water pollution issues. Discharge of untreated sewage is the single most important cause for pollution of surface and ground water in India. There is a large gap between generation and treatment of domestic waste water in India. The problem is not only that India lacks sufficient treatment capacity but also that the sewage treatment plants that survive do not operate and are not maintained. The majority of the government-owned sewage treatment plants remain closed most of the time due to indecent design or poor maintenance or lack of reliable electricity supply to operate the plants, together with absentee employees and poor management. The waste water generated in these areas normally percolates in the soil or evaporates. The uncollected wastes accrue in the urban areas cause unhygienic conditions and release a pollutant that leaches to surface and groundwater. Downstream, the untreated water is used for drinking, bathing, and washing. This situation is typical of many rivers in India. Other sources of water pollution include agriculture run off and small scale factories along the rivers and lakes of India. Fertilizers and pesticides used in agriculture have been found in rivers, lakes and ground water. Flooding during monsoons worsens India's water pollution problem, as it washes and moves all sorts of solid garbage and polluted soils into its rivers and wetlands.

5.2 Air Pollution

Air pollution in India is a serious issue with the major sources being fuel wood and biomass burning, fuel adulteration, vehicle emission and traffic blocking. Air pollution is also the main cause of the Asian brown cloud, which is causing the monsoon to be delayed. India is the world's largest consumer of fuel wood, agricultural waste and biomass for energy purposes. Traditional fuel (fuel wood, crop residue and dung cake) dominates domestic energy use in rural India and accounts for about 90% of the total. In urban areas, this traditional fuel constitutes about 24% of the total. Fuel wood, agric waste and biomass cake burning releases over 165 million tones of burning products into India's indoor and

Saarth

E-Journal of Research

ISSN NO: 2395-339X

outdoor air every year. These biomass-based household stoves in India are also a leading source of greenhouse emissions contributing to climate change. The annual crop burning practice in northwest India and north India, from October to December, are a major seasonal source of air pollution. Around 500 million tons of crop residues is burnt in open, releasing smoke, soot, NO_x, SO_x, PAHs and particulate material into the air. This burning has been found to be a leading cause of fog and smog problems through the winter over Punjab, Haryana, cities such as Delhi, and major population centers along the rivers through West Bengal. In other states of India, rice straw and other crop residue burning in open is a major source of air pollution.

Vehicle emissions are another source of air pollution. Vehicle emissions are worsened by fuel adulteration and poor fuel burning efficiencies from traffic jamming and low density of quality, high speed road network per 1000 people.

5.3 Land Pollution

Land pollution in India is due to pesticides and fertilizers as well as corrosion. In March 2009, the issue of Uranium poisoning in Punjab came into light, caused by fly ash ponds of thermal power stations, which reportedly lead to severe birth defects in children in the Faridkot and Bhatinda districts of Punjab. In 2012, the Government of India definite that the ground water in Malwa belt of Punjab has uranium metal that is 50% above the trace limits set by the United Nations' World Health Organization. Scientific studies, based on over 1000 samples from various sampling points, could not trace the source to fly ash and any sources from thermal power plants or industry as formerly supposed. The study also revealed that the uranium awareness in ground water of Malwa district is not 60 times the WHO limits, but only 50% above the WHO limit in 3 locations

5.4 Noise Pollution

Noise pollution is the worrying or extreme noise that may harm the activity or balance of human or animal life. Noise-wise India can be termed as the most polluted country in the world. The source of most outdoor noise worldwide is mainly caused by machines and transportation systems, motor vehicles, aircraft, and trains, firecrackers, use of loudspeakers for wedding ceremony, and political purposes and by temples and mosques make for noise pollution in residential areas.

Noise pollution The Supreme Court of India gave an important verdict on noise pollution in 2005. In recent times Government of India has set up norms of permissible noise levels in urban and rural areas. How they will be monitored and implemented is still not certain.

5.5 Biodiversity Conservation in India

India lying within the ecozone, hosts significant biodiversity. It is home to 7.6% of all mammalian, 12.6% of avian, 6.2% of reptilian, and 6.0% of flowering plant species. In recent decades, human infringement has posed a threat to India's wildlife. In

Saarth

E-Journal of Research

ISSN NO: 2395-339X

response, the system of national parks and protected areas, first established in 1935, was substantially expanded. In 1972, India enacted the Wildlife Protection Act and Project Tiger to safeguard crucial habitat; further national protections were promulgated in the 1980s. Along with over 500 wildlife sanctuaries, India now hosts 14 biosphere reserves, four of which are part of the World Network of Biosphere Reserves.

5.6 Greenhouse Gas Emissions

India was the third largest emitter of carbon dioxide, a major greenhouse gas, in 2009 at 1.65 Gt per year. With 17 percent of world population, India contributed some 5 percent of human-sourced carbon dioxide emission. On per capita basis, India emitted about 1.4 tons of carbon dioxide per person, in comparison to the United States' 17 tons per person, and a world average of 5.3 tons per person.

6. Environmental Remedies:

6.1 Fundamental Duties of the citizens of India with respect to the environment

Fundamental duties of the citizens of India with respect to the environment.

Clause (g) of Article 51 A 2 (g) 1 Clause (g) provides that it shall be the duty of every citizen of India – To protect and improve the natural environment including forests, lakes, rivers, and wild life and to have compassion for living creatures.

Clause 2(g) 4 provides that- Earth is the common heritage of man and animals. We have no right to annihilate or drive away from their territory or natural habitat the wild denizens. Ancient Indian thought talks of Sarvesham Shantir bhavatu (peace unto all living beings and entire environment) or Ahimsa paramodharma. Ahimsa paramo tapah (non-violence is the greatest duty and the greatest penance).

Clause 2(g) 5 provides that - The Environment (Protection) Act, 1986, is an important step in that direction. The range of its provisions and the far-reaching measures that can be undertaken through statutory rules and orders that can be issued under the Act, show that the duty to protect and improve the natural environment has been spelt out quite elaborately in our law.

6.2 Environmental Protection Acts, 1986

Environment (Protection) Act, 1986 Objective to provide the protection and improvement of environment. To make rules to regulate environmental pollution; To notify standards and maximum limits of pollutants of air, water, and soil for various areas and purposes; Prohibition and restriction on the handling of hazardous substances, and location of industries or with fine which may extend Whoever Person found to be the cause of pollution, may be liable for punishment for a term which may extend to five years to Rs.1,00,000 or both (Sec 15, 16, 17) If not comply fine of Rs. 5000 per day extra, still if not comply for more than one year, then imprisonment may extend up to 7 years.

Saarth

E-Journal of Research

ISSN NO: 2395-339X

6.3 Forest and Wildlife Protection Act, 1927

Forest and Wildlife Protection Act, 1927 –The Indian Forest Act and Amendment 1984; 1972 – The Wildlife Protection Act Rules 1973 and Amendment 1991 1980 – The Forest (Conservation) Act and Rules, 1981 WATER 1882 – The Easement Act. 1897 – The Indian Fisheries Act. 1956 – The River Boards Act. 1970 – The Merchant Shipping Act. 1974 – The Water (Prevention and Control of Pollution) Act. 1991 – The Coastal Regulation Zone Notification.

6.4 The Forest (Conservation) Act, 1980

This Act was adopted to protect and conserve forests. The Act restricts the powers of the state in respect of de-reservation of forests and use of forestland for non-forest purposes (the term non-forest purpose includes clearing any forestland for cultivation of cash crops, plantation crops, horticulture or any purpose other than re-forestation).

6.5 Air (Prevention and Control of Pollution) Act, 1981

To counter the problems associated with air pollution, ambient air quality standards were established, under the 1981 Act. The Act provides means for the control and abatement of air pollution. The Act seeks to combat air pollution by prohibiting the use of polluting fuels and substances, as well as by regulating appliances that give rise to air pollution. Under the Act establishing or operating of any industrial plant in the pollution control area requires consent from state boards. The boards are also expected to test the air in air pollution control areas, inspect pollution control equipment, and manufacturing processes.

To empower the central and state pollution boards to meet grave emergencies, the Air (Prevention and Control of Pollution) Amendment Act, 1987, was enacted. The boards were authorized to take immediate measures to tackle such emergencies and recover the expenses incurred from the offenders. The power to cancel consent for non-fulfillment of the conditions prescribed has also been emphasized in the Air Act Amendment. The Air (Prevention and Control of Pollution) Rules formulated in 1982, defined the procedures for conducting meetings of the boards, the powers of the presiding officers, decision-making, the quorum; manner in which the records of the meeting were to be set etc. They also prescribed the manner and the purpose of seeking assistance from specialists and the fee to be paid to them.

6.6 Water (Prevention and Control of Pollution) Act, 1974

This Act represented India first attempts to comprehensively deal with environmental issues. The Act prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance. The Act was amended in 1988 to conform closely to the provisions of the Environment Protection Act, 1986. It set up the CPCB (Central Pollution Control Board) which lays down

Saarth

E-Journal of Research

ISSN NO: 2395-339X

standards for the prevention and control of water pollution. At the State level, the SPCBs (State Pollution Control Board) function under the direction of the CPCB and the state government.

6.7 Water (Prevention and Control of Pollution) Amended Act, 1977

This Act provides for a levy and collection of an Amended on water consumed by industries and local authorities. It aims at augmenting the resources of the central and state boards for prevention and control of water pollution. Following this Act, The Water (Prevention and Control of Pollution) Amended Rules were formulated in 1978 for defining standards and indications for the kind of and location of meters that every consumer of water is required to install.

6.8 Factories Act, 1948 and its Amendment in 1987

The Factories Act, 1948 was a post-independence statute that explicitly showed concern for the environment. The primary aim of the 1948 Act has been to ensure the welfare of workers not only in their working conditions in the factories but also their employment benefits. While ensuring the safety and health of the workers, the Act contributes to environmental protection. The Act contains a comprehensive list of 29 categories of industries involving hazardous processes, which are defined as a process or activity where unless special care is taken, raw materials used therein or the intermediate or the finished products, by-products, wastes or effluents would: Cause material impairment to health of the persons engaged and result in the pollution of the general environment.

Reference

1. http://www.ripublication.com/gjmbs_spl/gjmbsv3n9_03.pdf
2. https://en.wikipedia.org/wiki/Central_Pollution_Control_Board
3. <https://en.wikipedia.org/w/index.php?search=noise+pollution+act+in+india&title=Special:Search&fulltext=1&searchToken=amegiiz8t1tvr34f16fsq0cf3>
4. https://en.wikipedia.org/wiki/Environmental_issues_in_India
5. Environmental Studies – Shree Gajanan Pustakalaya
6. Paryavaran Adhyayan – Erach Bharucha.
7. Environmental Studies – Popular Prakashan
8. <https://edukalife.blogspot.in/2013/01/definition-of-environment.html>
9. https://www.worldwidejournals.com/global-journal-for-research-analysisGJRA/file.php?val=July_2013_1374247344_27efa_14.pdf