



Environmental Pollution and Its Effect on Human Life

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ABSTRACT

Environmental pollution has a cumulative effect on the health of not just humans but every living being. Pollution mainly is categorized as air, water, land and noise pollution etc. The whole World is now realizing the threat to its precious environment. Environmental issues which have been for a long time part of Indian thought and social processes are reflected in the constitution of the Republic of India adopted in 1950.

I. INTRODUCTION

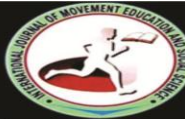
Environmental pollution is a concept which comprises of pollution of various biological as well as physical components of the Earth as a result of human activities. This can be classified into various types such as air, water, land, noise pollution, thermal pollution, and radiation pollution etc. Thus, Environmental pollution is one of the greatest challenges that the world is facing today. It started with the Industrial revolution. Pollution is increasing day by day causing damage to the Earth. Environmental pollution has its own causes, effects and solutions. Environmental pollution has a cumulative effect on the health of not just humans, but every living being.

The rapid Industrial growth has made water pollution and hazardous wastes pressing environmental problems in many areas of the developing World. The world has now realized the threat to the environment. The environmental issues have been for a long time a part of Indian thought and are reflected in the constitution of India.

II. WATER POLLUTION

Water pollution also affects the environment of Earth as we need clean water to drink, to irrigate our fields etc. The polluted water affects our health very badly. Diseases like amoebiasis, typhoid and hook worm are caused by polluted drinking water

- (i) The chemicals such as metals, lead and hydrocarbon can cause hormonal and reproductive problems and damage nervous system, kidney, liver etc.



- (ii) A polluted beach causes rashes, hepatitis, gastroenteritis, diarrhea, encephalitis, stomach aches and vomiting.
- (iii) Water pollution affects marine life which is one of our food sources.

Land pollution

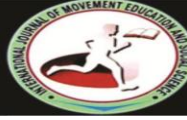
- (i) When land pollution is severe, it damages the soil.
- (ii) This leads to loss of fertility and means that native plants may fail to grow and it also disturbs the ecosystem of a food source for animals
- (iii) Food and Agriculture Organization of the United Nations document on soil biodiversity (FAO soil biodiversity document) points out excessive use of chemical fertilizers and pesticides kills the beneficial soil microorganisms, reducing their biodiversity with devastating consequences for soil health. Microorganisms are necessary for a couple of things that contribute to the fertility of soil
- (iv) The health hazard is associated with the consumption of food and vegetables grown in the contaminated soil causing headache, nausea and damage brain liver etc.
- (v) New constructive sites can also be the cause of land pollution.

Air pollution

- (i) Breathing polluted air is a cause of higher risk for asthma and other respiratory diseases.
- (ii) When exposed to ground ozone for 6 to 7 hours, scientific evidence shows that healthy people's lung function decreased and they suffered from respiratory inflammation.
- (iii) Coughing and wheezing are common symptoms observed among city folks.
- (iv) It damages the immune system, endocrine and reproductive systems and causes heart problems
- (v) The toxic chemicals released into the air settle into plants and water sources. Animals eat the contaminated plants and drink the water.

Air pollution is a major and growing risk factor for ill health in India, contributing significantly to the country's burden of disease. As per the Global Burden of Disease comparative risk assessment for 2015, air pollution exposure contributes to approximately 1.8 million premature deaths and 49 million disability ranking it among the top risk factors for ill health in India.

Among major health risk factors in India, ambient air pollution (AAP) is ranked 5th in mortality and 7th in overall health burden. According to the World Health Organization (WHO), 10 of the 20 most polluted cities in the world are in India, including Delhi, Patna, Gwalior, Raipur etc.¹ PM levels often exceed the National Ambient Air Quality Standards (NAAQS) in more than three-fourths of Indian cities².



A recent report from the World Health Organization, drawing on measurements and calculations as of 2016 from air monitoring stations in 4,300 cities, establishes clearly that air pollution is a global problem. A whopping nine in 10 people on Earth breathe highly polluted air, and more than 80 percent of urban dwellers have to endure outdoor pollution that exceeds health standards, according to the WHO's World Global Ambient Air Quality Database.

III.CONSTITUTIONAL REMEDY

The Indian Constitution is amongst the few in the world that contains specific provisions on environment protection. The chapters directive principles of state policy and the fundamental duties are explicitly enunciated the nation commitment to protect and improve the environment. It was the first time when responsibility of protection of the environment imposed upon the states through Constitution (Forty Second Amendment) Act, 1976. The Directive Principles of State policy, an integral and significant element of constitution of India, contain provisions, which reflect the commitment of the State to protect the environment with regard to forests and wildlife and which join upon the citizens of India the special responsibility to protect and improve the environment

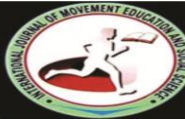
Article 48-A^[xiv] the provision reads as follows: "The State shall endeavor to protect and improve the environment and to safeguard the forest and wildlife of the country."The Amendment also inserted Part VI-A (Fundamental duty) in the Constitution, which reads as follows:

Article 51-A (g) (xv) "It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, and wildlife and to have compassion for living creature."

In *Sachidananda Pandey Vs State of Bengal* (xvi) the Supreme Court observed "whenever a problem of ecology is brought before the court, the court is bound to bear in mind Article 48-A and Article 51-A(g).

The need for protection and conservation of environment and sustainable use of natural resources is reflected in the constitutional framework of India and also in the international commitments of India.

The foundation of the present day institutional framework for environmental programmes in India goes back to the 1970s with the establishment of the National Committee of Environmental Planning and Coordination immediately after the historic Stockholm Conference on Environment held in 1972. After the Stockholm Conference, the National Council for Environmental Policy and Planning was set up in 1972 within the Department of Science and Technology to establish a regulatory body to look after the environment-related issues. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF).



Acts for the Protection of Environmental Pollution

- **THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974**

The Water Prevention and Control of Pollution Act, 1974 (the "Water Act") has been enacted to provide for the prevention and control of water pollution and to maintain or restore wholesomeness of water in the country. It further provides for the establishment of Boards for the prevention and control of water pollution with a view to carry out the aforesaid purposes. The Water Act prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance

- **THE ENVIRONMENT PROTECTION ACT, 1986**

The Environment Protection Act, 1986 (the "Environment Act") provides for the protection and improvement of environment. The Environment Protection Act establishes the framework for studying, planning and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment. It is an umbrella legislation designed to provide a framework for the coordination of central and state authorities established under the Water Act, 1974

- **POLLUTION PREVENTION ACT 1990**

The pollution prevention Act focused Industry, Government and public attention on reducing the amount of pollution through cost effective changes in production, operation and raw material use. The opportunities also not realized due to existing regulations

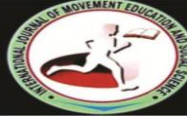
Pollution prevention includes practices that increase efficiency in the use of energy, water, or other natural resources and protect or resource.

- **AIR POLLUTION CONTROL ACT 1995**

The air pollution control Act 1995 (pub.L.84-159, ch.360, 69 Stat.322) was the first clean Air Act (United States) enacted by Congress to address the national environmental problem of Air Pollution on July 14, 1955. This was "an act to provide research and technical assistance relating to air pollution control".

IV. MINISTRY OF ENVIRONMENT AND FORESTS

Department of Environment, Forests and Wildlife New Delhi Dated the 28th March, 1988 NOTIFICATION G.S.R. 382 (E).-In exercise of the powers conferred by sub-section (2) of section 1 of the Air (Prevention & Control of Pollution) Amendment Act, 1987 (47 of 1987), the Central Government hereby appoints the 1st day



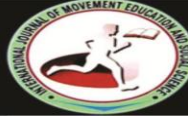
of April, 1988 as the date on which all the provisions of the said Act excepting the provisions contained in clauses (ii) and (iv) of section 2, section 3, clause (i) of section 4 and section 15 shall come into force in the whole of India. No. Q 16012/2/85-PL (T.N.SESHAN) Secretary to the Government of India Source: The Gazette of India Part II, Section 3, Sub-section (i) Extraordinary .⁴

APPELLATE AUTHORITY UNDER THE ACT MINISTRY OF ENVIRONMENT & FORESTS (Department of Environment, Forests & Wildlife) NOTIFICATION New Delhi, the 12th December, 1989 S.O. 1032(E).-In exercise of the powers conferred by sub-section (I) of section 31 read with sub-section (2) of the said section of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981), and in supersession of the notification of the Government of India in the Ministry of Environment and Forests (Department Or Environment, Forests and Wildlife) No. S.O. 117(E) dated the 8th February, 1988, the Central Government hereby constitutes the Appellate Authority- for the Union Territories and appoints the Joint Secretary in-charge of pollution control in the Ministry of Environment and Forests as the said authority. The headquarters of the Appellate Authority shall be at New Delhi. [NO. Q-18011/7/89-CPA] S.S. HASURKAR, Jt.Secy. Source: The Gazette of India Part II, Section 3, Sub-section (ii) Extraordinary, dated 13th December, 1989.⁵

The United Nations in 1997 has suggested a list of indicators on environment for which a regular set of information needs to be maintained. The selection of environmental indicators relevant to environmental phenomenon of each country is a crucial activity in any environment statistics programme.

V.DEFICIENCIES

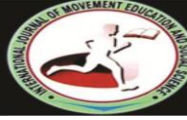
○ At the Centre, the Central Statistical Organization co-ordinates with various central agencies to publish in its annual Compendium of Environment Statistics. However, since there is no suitable coordinating mechanism at the State level, the availability of State-level data on environment is quite poor. Data on a number of indicators listed by Asian Development Bank (ADB) are either presently not being compiled or are only partially available. The database on a variety of environmental parameters and indicators as available presently through different sources is quite weak and needs to be substantially augmented. Although the Ministry of Environment and Forests is the nodal agency for maintenance of proper statistical system related to environment, the availability of statistical infrastructure in the Ministry is totally inadequate to meet the growing data requirements. The situation is more or less similar in organizations such as Forest Survey of India, Indian Council for Forestry Education & Research, Central Pollution Control Board, etc. functioning under the administrative control of the Ministry of Environment and Forests.



VI. CONCLUSIONS AND RECOMMENDATIONS

The Commission recognizes that an integrated approach to economic, environment and social policies requires comprehensive databases through appropriate statistical frameworks and systems. The availability of a wide range of timely and reliable information on environment and related indicators is of utmost importance. The Commission therefore recommends:

- Central Statistical Organization (CSO) should continue to co-ordinate and collate the relevant information on environment as is being done at present and bring out the Compendium on Environment Statistics on an annual basis. CSO should also provide necessary guidance to the States for development of Environment Statistics and indicators.
- The database on Environment Statistics should be strengthened and it should be linked with the Environmental Information System (ENVIS) already functioning in the Ministry of Environment and Forests.
- CSO in collaboration with the Ministry of Environment and Forests and other agencies should finalize the list of Environmental indicators needed for the country and should take the steps for regular collection of relevant information.
- Considering the emerging need for Environment Statistics, a Statistical Division in the Ministry of Environment and Forests, should be established to cater to the requirements of environment and forest related data and analysis of the same. A Statistical Adviser at an appropriate level from Indian Statistical Service should head the Division.
- Environment Statistics Cells should be created in the Directorate of Economics and Statistics in all the States and the same should be responsible for coordination and collation of information from other related agencies in the State.
- However, environment being a multi-disciplinary subject involving complex subjects like Bio-diversity, Atmosphere, Water, Land and Soil and Human Settlements, it seemed difficult to collect and analyze data on these parameters and develop interrelationships among them. It, therefore, became necessary to develop an efficient statistical system on environment that could meet the growing demand of data on various aspects of environment by the various governmental agencies, environmentalists and general public.
- Global Warming is not a threat, it's happening right now. In spite of all the information about global warming, there are still some people who believe it's all a big conspiracy. It cannot be disputed that 97% of climate science and peer reviewed studies all agree that global warming is real and we are causing it.



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3. Dey S, Di Girolamo L, van Donkelaar A, Tripathi SN, Gupta T, Mohan M. Variability of outdoor fine particulate (PM_{2.5}) concentration in the Indian subcontinent: a remote sensing approach. *Remote Sens Environ*. 2012;127:153–61.
4. *The Gazette of India Part II, Section 3*
5. *The Gazette of India Part II, Section 3, Sub-section (ii)*