

# GROWTH OF INDIA WITH ENVIRONMENTAL ISSUES POLICIES AND ACTS

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**Abstract:** Although India has a rich and long history of environmental laws dating back to the 1970s, it still ranks very low on air and water pollution levels compared to the rest of the world resulting in higher rates of infant mortality and lower life expectancy rates. Poor sanitation conditions and sewage problems compound the problem affecting the health of ordinary citizens in India. The reasons for this disconnect between enlightened environmental laws and high levels of pollution could be traced to lax enforcement of existing environmental laws, discrepancies in the environmental guidelines for businesses to follow between the central government and at the state levels, and the existence of a large number of SMEs who neither have the resources nor the technical skills to adhere to the existing environmental laws. Using extensive secondary research, this paper suggests a series of steps to help the country achieve safe air and water pollution levels resulting in improved health conditions for its citizens.

Key word: Environmental issue, global issues,

## 1. Introduction

With a population of 1.35 billion, India is the second most populous country in the world. Improving economic conditions is a primary reason for such a large population and the standard of living within India has increased as well in recent decades. For example, the average life expectancy increased from 42.4 to 68.3 years between 1960 and 2015.

Many Indians have been settling in the country's ever-expanding cities as the most economic opportunities can be found there. According to the McKinsey Global Institute, India will have more than 68 cities with populations of greater than one million people by 2030, and over 40 percent of Indians will live in cities of greater than one million people by 2025. western part of the country, while eastern India sees some of the highest annual rainfall totals in the world during the monsoon season from June to October.

## 2. ENVIRONMENTAL CONCERNS AS A GLOBAL ISSUE

India is not the only country facing environmental issues. Definitely air and water pollution and climate change are more global issues that require a concerted effort by all nations to solve. A report by the Intergovernmental Panel on Climate Change (IPCC) in "Climate Change Science Compendium 2009", suggests that the world will be experiencing more of ocean acidification, ice-sheet melting, sea-level rise, and so-called tipping points in climate effects much sooner than ever thought off (Parks, 2009).

### 2.1. Global warming

With the recent expansion of human activities, a large amount of greenhouse gases such as carbon dioxide and methane gas is emitted into the air, enhancing greenhouse effects and increasing the possibility of global warming.

The 2001 report of the Intergovernmental Panel on Climate Change (IPCC) indicates a rise of the average global surface

temperature by  $0.6 \pm 0.2^\circ$  since 1861 and forecasts a further rise by  $1.4$  to  $5.8^\circ$  until 2100 and a rise of the sea level of between 9cm and 88cm.

## 2.2. Ozone layer depletion

It became clear that the ozone layer is being depleted by ozone layer depletion substances such as chlorofluorocarbon (CFC). When an ozone layer is depleted, harmful ultra violet rays reach the Earth's surface, causing health hazards such as skin cancer or cataracts.

Ozone layers being depleted globally except over tropical areas and the rate of depletion are higher in the highest latitude regions. In Japan also, a statistically significant trend has been verified in Sapporo, and in the South Pole, the largest ozone hole in history was observed in 2000[1]

## 2.3. Acid rain

Acid rain is a rain that shows strong acidity for dissolved sulfur oxides and nitrogen oxides that

are generated from combustion of fossil fuels and so on. The impact of acid rain over a wide range of PISCES for the acidification of inland water was such as lakes, swamps, and rivers, and forests by acidification of soils, and acceleration of deterioration or collapse of trees and cultural heritage buildings by acid deposition, is feared.

## 2.4. Photochemical oxidants

Photochemical oxidants are generated as the secondary product of photochemical reactions when primary pollutants mainly consisting of nitrogen dioxides and hydrocarbons that are emitted from factories, offices, and automobiles receive irradiation from sunlight. Photochemical oxidants cause photochemical smog that irritates the eyes and throats or influences the respiratory organs, however, the level of photochemical oxidants still exceeds the environmental standard in almost all the areas nationwide.

## 2.5. Nitrogen oxides

Nitrogen oxides that adversely affect the respiratory organs at high concentration are generated mainly by material combustion. They are mainly generated from stationary sources such as factories and mobile sources such as automobiles.

## 2.6. Suspended particulate matter

Suspended particulate matter is particles with diameter of 10 micro meters or less and floats in the air. Suspended particulate matter consists of two categories: primary particles such as diesel exhaust particles that are emitted from diesel automobiles and flanged-up soils; and secondary particles that are produced by changing gaseous substances such as nitrogen oxides into particles in the air.

## 3. Environmental Issues of India

While India has gone through a rapid period of economic growth in recent years, critics say that growth has come at a severe cost to the country's environment in the form of deforestation, pollution and threats to endangered species.

A high standard of living in India has increased the demand for lumber and this has led to significant deforestation within the country. According to the World Wildlife Fund, overall industrial roundwood usage in India is currently the 8th highest in the world and could surpass 70 million square meters annually by 2020. Domestic supply would fall short of this number by approximately 14 million square meters[2].

As the nation must count heavily on imports to meet this growing need, there is anxiety that this could cause loss of forests with high conservation values and significantly lower biodiversity. The problem is only made worse by the fact that some of the world's most iconic and endangered species live in India.

India is also known for having some of the world's worst pollution. A 2013 report from India's Central Pollution Control Board found that more than 2,700 million liters per day of domestic sewage is discharged by cities located along the Ganges River.

Cities have grown without planning and investment, so most do not have underground drainage networks," the report said. "Waste is generated but not conveyed to treatment plants. There is no power to run treatment plants; bankrupt municipalities and water utilities have no money to pay for operations[3].

### **3.2. Environmental Policies of India**

India's current environmental policy is dominated by the country's landmark National Environment Policy 2006. The policy starts by acknowledging environmental degradation in India is being driven by population growth, poor resource usage choices, and poverty. The guidelines then go on to state that environmental protections need to be integrated into development processes.

The policy also stated that a lack of full scientific certainty is not a valid reason for postponing measures to stop degradation. Finally, the policy said any polluter should generally bear the cost of pollution. The 2006 policy also outlined plans for protecting environmentally sensitive zones, water conservation measures, wildlife protection and protection of wetlands.

## **4. Clean Technology in India**

Despite its reputation for environmental problems, India is starting to invest in clean technology on a massive scale. India's Ministry of New & Renewable Energy recently reported that the country has an operational solar power capacity of 12.2

GW – a 370% increase over the 3 years. India's solar energy capacity has largely been fueled by the country's National Solar Mission and the endeavour, and now has the world's largest renewable energy expansion program in place with the aim of generating 175 GW by 2022.

Many investors and venture capitalists are now seeing India as the 'next big thing' for clean technology investments. In 2017, The National predicted clean energy investments in India will surpass \$1 trillion dollars by 2030, with \$250 billion being invested for the next five years alone. Observers credited energy reforms from the government elected in May 2014 as the reason for the boom in clean energy investment[4].

### **4.1 A Clean Future?**

According to a 2014 report from the World Bank, ecosystem degradation in India currently costs the country \$80 billion annually, or 5.7 percent of GDP. If the country wants to break the cycle of environmental loss and resource depletion, it must further embrace clean technology and sustainable policies, the World Bank said.

The good news, the report said, is sustainable policies and technology is affordable, with policy interventions potentially yielding benefits with minimal costs for India. A low-emission, resource-efficient strategy would be particularly helpful. For example, reducing particulate emission by 30 percent would cost \$97 billion and reduce growth by 0.03 percent, yet save \$105 billion in healthcare costs.

## **5. Environment Laws In India**

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 Constitution under Part IVA (Art 51A-Fundamental Duties) casts a duty on every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures. Further, the Constitution of India under Part IV (Art 48A-Directive Principles of State Policies) stipulates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country[5].

The main environmental laws in India include the:

- Water (Prevention and Control of Pollution) Act 1974 (Water Act), which also initially identified the powers, functions and hierarchy of the environmental agencies, the CPCB and the SPCBs.
- Air (Prevention and Control of Pollution) Act 1981 (Air Act).
- Environment (Protection) Act 1986 (EP Act). This umbrella law enables the central government to take measures it deems necessary to protect and improve the environment, and to prevent, control and abates environmental pollution. A wide range of rules and notifications have been adopted under it, such as the:
  - E-Waste (Management) Rules 2016, as amended in 2018 (E-Waste Rules);
  - Bio-Medical Waste Management Rules 2016;
  - Plastic Waste Management Rules 2016;
  - Solid Waste Management Rules, 2016;
  - Construction and Demolition Waste Management Rules 2016;
  - Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016, as amended in 2019 (HW Rules);

- Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (MSIHC Rules);
- Coastal Regulation Zone Notification 2019; and
- Environment Impact Assessment Notification 2006.
- Wild Life (Protection) Act 1972.
- Forest (Conservation) Act 1980.
- Public Liability Insurance Act 1991.
- Biological Diversity Act 2002.
- National Green Tribunal Act 2010.

## 6. GOVERNMENT INITIATIVES

Degradation of the environment and its disastrous consequences have been a matter of great concern for governments all over the world. Several legislations have been passed to provide a legal framework for the management and preservation of the environment. Environment was first discussed on June 5, 1972 at the United Nations Conference on “Human Environment” held at Stockholm leading to the declaration of June 5 as World Environment Day. It is creditable that within four years of the historic Stockholm Conference, India enacted legislation aimed at protection of the environment which later formed a part of the Indian Constitution[6]. The 42nd Amendment Article 48A of our Constitution provides “The State shall endeavour to protect and improve the environment and to safeguard forests and wildlife in the country” and Article 51A (g) provides “It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for all living creatures”. Thus environment was given a pride of place in the Directive Principles of State Policy and Fundamental Rights.

The need for integrating environmental factors into the process of planned sustainable development was first



highlighted in the Fourth Five Year Plan (1969-1974). Thus, in our country the debate between environments versus development was triggered as early as in the 1960s[7].

The other important milestones in the path of environment conservation are:

1. In 1972 the National Committee on Environmental Planning and Coordination (NCEPC) was set up to serve as a high level advisory body to the government.
2. In 1980 the N.D. Tiwari Committee was appointed which recommended the setting up of an independent Department of Environment under the Government of India, which subsequently became a full-fledged Ministry of Environment and Forests in 1985.
3. The Wildlife Protection Act was passed in 1972 (and subsequently amended in 2002) for setting up National parks and sanctuaries.
4. The Wildlife Protection Rules were passed in 1973 for the protection of all bird and animal species irrespective of their habitat. As a result, conservation projects were launched for endangered species which have contributed in a large measure to the increase in wildlife in India especially Project Tiger.
5. Forest Conservation Act of 1980 for protection of all types of forests and prevention of non-forest activities was amended in 1998.
6. Environment Rules for Siting of Industrial projects were passed in 1999.
7. The Biological Diversity Act of 2002 laid down clear guidelines for conservation of the biological diversity of the country.
8. The Prevention of cruelty to animals Act of 1960 was later amended to Animal welfare Act in 2006.
9. The State /Union Territory Minor Forest Produce (Ownership of Forest Dependent Community) Act of 2005 was a landmark legislature which recognised the legitimate

rights of the forest dwellers to the use of forest produce.

10. The National Green Tribunal Act of 2010 which enables creation of special tribunals for expeditious disposal of cases involving environment.

#### **7. MINISTRY OF ENVIRONMENT AND FORESTS (MOEF)**

MoEF set up in 1985, implements the various environment protection laws all over the country through the Central and State Pollution Control Boards[8].

MoEF has the mandate to

- Monitor and control pollution especially in industries,
- Increase the forest cover in the country,
- Conserve and increase wildlife and the rich biodiversity of the country,
- Support research in Environmental Science and Technology.
- MoEF works closely with the Ministry of Non-Conventional Energy Sources and the Department of Ocean Development (DOD). It is also the nodal agency for monitoring climate change in the country. The Forest Survey of India monitors changes in the land and forest resources and implements social forestry programmes.
- In 1982, MoEF instituted the Environment Information System to provide information to policy planners, decision makers, scientists, industry and the general public through workshops and seminars in regional languages and extensive use of the print and electronic media.
- The Government has made Environment Impact Assessment (EIA) compulsory for all proposed developmental projects. EIA is an environment management tool to evaluate the possible impact of projects on the environment and involves sampling of air, water and soil followed by analysis. Technical aspects

like effluent emission, air pollution and noise pollution are also studied[9].

- The Central and State Pollution Control Boards are required to ensure the strict implementation of the policies laid down by the government to conserve the environment. Sadly these well intentioned rules are, more often than not, flouted and unscrupulous elements continue to ravage the fragile ecosystem of the country[10].

## 8. CONCLUSIONS

Public awareness about environmental problems has been created to some extent by several agencies-government, pollution control boards, academic and research institutions, NGOs and media. A synergistic collaboration between all these stakeholders alone can prevent further damage to the fragile environment. Public awareness is perhaps the strongest bulk work against exploitation and degradation of the environment. After all environment is of the people, for the people and by the people.

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