# Impact of Lockdown on Environment in India

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#### Abstract

This paper has had a good impact on the environment as a result of the lockdown caused by India's Covid-19 which analyzes the issue of climate change. In human civilization, the origin of trees, the origin of crops, food, settlements and clothing are being developed in different parts of the world centered on the climate. Lockdowns in India and around the world have reduced the amount of pollutants in the air because the environment has improved due to the closure of vehicles, trains, factory chemicals, dust, etc., which are sources of harmful gases that affect the environment. Air pollution affects both fauna and flora. The main harmful gases in air pollution are the source of P.M 5, P.M 10, sulfur dioxide (SO2), and the source of carbon monoxide pollution (CO). The main gas that causes various diseases in the human body is NO2. This gas causes cough, asthma, respiratory problems, eye problems, increasing the amount of diseases in the body and experts think that this gas is very harmful in the case of covid-19 disease. Some countries, such as the European Space Agency, have tested satellites and pollutants to see if the lockdown has improved air quality. Satellite imagery from the European space agency Copernicus Sentinel 5P has been used to measure NO2 gas in Delhi, Mumbai and surrounding areas in India in March 2020. Climate change is a natural phenomenon but plays a major role Humans therefore all humanity Must fight together to save the earth from pollution. This study is based on secondary data. Secondary information for research work has been collected from books, journals, newspapers, libraries, magazines etc.

Key words: Covid-19, lockdown, pollution, environment

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#### Introduction:

The announcement of the lockdown due to the Covid-19 epidemic has seen a significant shift in the environment in India and around the world, which has

played an important role in the flora and fauna and has protected the environment as much as the Covid-19 has damaged the world economy. Lockdown in India has resulted in closure of all vehicles, private vehicles, domestic and international flights, trains, etc., reducing the amount of water pollution and air pollution due to non-mixing of carbon monoxide, nitrogen oxides, and particulate matter and burnt hydrocarbons. There has also been a sharp decline in environmental noise which is considered to be one of the main sources of human discomfort. The lockdown also used satellite imagery from the European Space Agency's Copernicus Sentinel 5P satellite to measure NO2 gas in and around Delhi, which measured environmental pollution. Mumbai is a business capital of India and the amount of air pollution NO2 gas before lockdown was  $117\mu$ mol / m2 and the amount of NO2 gas pollution after lockdown is  $77\mu$ Mol / m2.

The lockdown has made monetary and social harm the Indian public. (The Hindu, 2020) For a developing country like India, the detrimental effect on the environment has a significant impact on the socio-economic as well as the development of the country which in turn hinders the overall development of the country. It is through the environment that human society carries out various activities which cannot be done without the environment. The Covid has made critical harm the climate across India just as huge financial and different impacts. If the Government of India and various State Governments take some steps to protect the environment, it is not enough. In order to protect the environment properly, the cooperation of all the people is required and the governments of various nations need to find important ways to ensure the climate past the boundaries of the country. (Park, 2018)

#### About our environment:

All the visible and invisible elements or materials that affect human life and livelihood are called environment. Different scientists have come up with different definitions of the environment, such as Arms says the surrounding biological and natural conditions of a living community. The human community does everything by adopting the environment. The environment is the main component of food and livelihood of animals and plants. (Mallik, 2011)

### Main elements of environment:

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- 1. **Lithosphere:** Lithosphere refers to the layer above the Mantle. This layer consists mainly of rock and mineral paths. This layer extends from 5 km to 50 km. It consists mainly of a thin layer of soil. At this level, plains, plateaus, deserts, hills, valleys, etc., form different landforms that form suitable habitats for human life.(Pal,2007)
- 2. **Hydrosphere:** Hydrosphere refers to the main reservoir of water on Earth. Hydrosphere is said to be the main source of water on Earth and other planets, although research is still underway on whether there is water on planets other than Earth. All this process is done through the water cycle of the water contained in the hydro spare. The main source of water in the world is rivers, streams, lakes, seas, oceans, etc. This process is affected through a cycle. (Stanley, n.d.)
- 3. Atmosphere: Atmosphere is a layer formed by the combination of different gases that surround the earth. The main gases in the atmosphere are nitrogen, oxygen, carbon dioxide, methane, water vapor, etc. The atmosphere plays an important role in the life of animals and plants on earth. Atmospheric greenhouse gases also play a role in protecting the atmosphere from other harmful gases. The atmosphere has different layers. (Sen,2010)
- 4. **Biosphere:** The biosphere is the part of the earth where plants and animals live. All kinds of ecosystems function in this biosphere. The most well-known habitat of the earth is the biosphere, which is where the various physiological functions for the survival of animals and plants are performed. It is through this stage that food production, eating, etc. are completed, so this stage is called the important stage of life. (Mondal, et.al, 2017)

### Types of environment:

The divisions of the environment are-

- 1. Physical environment.
- 2. Social environment.
- 3. Culture environment.

#### Problems of environment:

- 1. Ozone Depletion.
- 2. Greenhouse Effect

- 3. Global Warming.
- 4. Desertification.
- 5. Deforestation.
- 6. Loss of Biodiversity.
- 7. Waste materials. (Conserve energy future, n.d)

#### Benefit of environment:

- 1. Improved Air Quality.
- 2. Improved Water Quality.
- 3. Climate Change.
- 4. Biodiversity and Habitat Protection.

**Objective:** The main objectives are as follows-

- 1. Understanding the impact on the environment as a result of lockdown.
- 2. Understand the role of Indians in protecting the environment.

**Methodology:** This study followed descriptive research design based on secondary data. Secondary data information has been gathered from various places like Newspaper, TV, and Official reports, documents, Journal etc.

## What is lockdown?

Lockdown usually refers to various restrictions imposed by the government that prevent people from leaving their homes or territories. However, the government has announced a ban on war-torn areas, natural disasters, terrorist attacks, etc. Currently, the central and state governments are exploiting lockdowns to protect themselves from the corona virus, which is transmitted from one person to another. Experts believe that lockdown is the only way to protect you from this virus. Countries like China Bangladesh, India, Indonesia, Iraq, Mongolia, the Philippines, Sri Lanka, U.S.A, U.K Norway, Sweden, Finland, and Denmark and Japan have announced lockdowns to protect themselves from the virus (The Economic Times, 2020).

## Relationship between lockdown and environment:

Although there is no special relationship between the environment and lockdown, there is a special relationship between the environment and lockdown during the Covid-19 virus at the present time. Air pollution, water pollution have decreased

and water levels have changed significantly in Delhi, Kolkata, Mumbai, Mumbai, Bangalore and Uttar Pradesh.

Researchers in India have found that nitrogen dioxide (NO2) has significantly reduced the amount of greenhouse gases emitted from the combustion of fossil fuels, as well as an average of 12 per cent in India and 31.5 per cent in various cities. Also more notable is the decrease in PM10 and PM2.5 by 43% and 31%, which is important for the environment. (Comunian et al, 2020)

## The impact of lockdown on environment:

## Reduce air pollution:

- Air pollution in India and around the world has been significantly reduced due to the lockdown caused by the corona virus. The virus has a positive effect on the environment. Due to the shutdown of vehicles, train industry, etc., the whole world has become pollution free. (Poetzscher,2020) This is the first time in India that such a dramatic change has taken place in the environment. The amount of pollution has been reduced as a result of reduction in the amount of nitrogen dioxide, Carbon monoxide, Ozone gas emitted from vehicles, train industries etc. In addition, air pollution causes many health problems, especially respiratory illnesses such as asthma. (Dwivedi,2020)

## Greenhouse gas emission:

Earth's greenhouse gases help to warm the atmosphere. The major gases liable for the nursery sway fuse carbon dioxide, methane, nitrous oxide and water vapor. (Melissa ,2019) Due to the lockdown, all economic activities, including the closure of industrial plants, have reduced the amount of greenhouse gases. Emissions are expected to decline when India and the world shut down factories and shops. This lockdown will reduce the demand for oil and have a positive impact on the environment as greenhouse gas emissions will decrease. (Arora,2020)

### Economic crisis:

India's lockdown has created an economic crisis among the people. The coronavirus has caused problems in shutting down all necessary economic activities, as well as in the industry and airlines. All of these things are causing huge economic losses around the world. (Ghosh 2020) Due to this lockdown, organized and unorganized people have lost their jobs and people are not able to move from one place to another. As a result, people are

suffering economic losses in every case. This economic crisis has created an economic recession all over the world. (Deka, 2021)

# Reduce water pollution:

Due to the Indian lockdown, researchers have tested water in the sea and in various rivers, ponds, reservoirs, etc., and found that the level of water pollution has decreased significantly. (Balamurugan, 2021) In India, the amount of pollution in the Ganges, Yamuna and other rivers is less than in previous years. The main reason for this reduction in water pollution is the ongoing lockdown in Corona. (Lokhandwala, 2020)

# Increase domestic fuel consumption:

Due to the lockdown in India, more people are in their homes and the use of domestic energy is increasing. This became one of the main effects of the lockdown on the environment. (Ghosh,2020) Due to the lockdown, people in public and private offices are working from home, which is believed to have led to a rapid increase in domestic fuel consumption. Due to the lockdown, all the family members are at home and they also use a lot of domestic energy. In addition, the use of energy for educational and commercial purposes has increased rapidly at the present time (Bhat, 2021).

# Reducing the amount of airborne diseases:

Due to the lockdown, the number of airborne diseases is much less. This type of disease is caused by a mixture of pollutants in the air and causes coughing or sneezing and difficulty breathing. Airborne viruses can affect both animals and humans. (Ecole, 2020)

# Suggestion:

The following steps need to be taken to protect the environment-

- 1. Proper use of natural resources and taking steps to prevent pollution from various processes involved in our industrial activities.
- 2. Proper enforcement of laws to protect the environment.
- 3. Conduct environmental protection activities.
- 4. Raise awareness for environmental protection.
- 5. According to Article 51 of the Constitution of India, it is 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 animals.
- 6. Proper implementation of annual tree planting program.

### Conclusion:

The natural environment keeps the animals and plants alive. The lockdown for

the corona virus in India and around the world has had a positive effect on the environment, which is good for the human race. The lockdown has reduced pollution levels in various cities in India, protecting people from air and water pollution. Environmental impacts have been observed across India due to the lockdown, which has resulted in significant changes in air pollution, water pollution and other natural factors. The impact of the lockdown on water pollution, air pollution, etc. in the river has been much less. It is the duty of the government and the common man to protect the environment by playing a significant role in protecting the environment in the future.

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