



# ECONOMY AND ENVIRONMENT

Current Issues and Concerns

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# Indirect Impact of Covid-19 on Environment in Indian Context

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## Abstract

COVID-19 which is an infectious disease caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), is a global health challenge in the twenty-first century. The SARS-CoV-2 was first identified in Wuhan, China in December 2019 and it has spread to more than 210 countries worldwide represent the pandemic declared by World Health Organization on 11<sup>th</sup> March, 2020. Worldwide spread of COVID-19 in a short time has brought a dramatic decrease in industrial activities, road traffic as well as on the economic activities in every countries of the world. Restricted human activities with nature during this lockdown period in India have appeared as a blessing for environment. This article aims to show the positive as well as negative impacts on environment in India with the help of air quality data of various parameters received from European Space Agency and Central Pollution Control Board online portal and from various satellite images to show the spatial pattern of air and water quality in pre and during lockdown period. The result shows that during lockdown period air and water quality is significantly improved.

**Keywords:** Central Pollution Control Board, COVID-19, lockdown, SARS-CoV-2

## 1. Introduction

Coronavirus are one kind of virus which affects human beings through transmission. This is the third time in past two decades in world history that a novel virus has created pandemic situation, after Severe Acute Respiratory Syndrome (SARS) in 2003 and Middle East Respiratory Syndrome (MERS-CoV) in 2012. The first case of SARS-CoV-2 was first identified in Wuhan, China in December. Later on, 11<sup>th</sup> February, 2020 WHO Director- General announced this novel corona virus as 'COVID-19' which is a RNA virus and are 65nm-125nm in diameter. Later, WHO Director- General declared Covid-19 as pandemic disease on 11<sup>th</sup> March, 2020. The major causes of concern for Covid-19 includes its global scale transmission, repeated emergence, significant number of deaths in vulnerable or susceptible groups.

The Government of India confirmed India's first case of Corona virus disease- 2019 on 30 January 2020 in the state of Kerala, followed by two other cases on February 2 and 3 again in Kerala having travel history from Wuhan, China. On 24 March 2020, the Government of India ordered a nationwide lockdown for 21 days, which was further extended for 19 days on April 14, 2020 in II phase followed by 14 days till 17<sup>th</sup> May in III phase and more 14 days in Phase IV, limiting movement of the entire 1.2 billion population of India as a preventive measure against the COVID-19. As per the reports received from Ministry of Health & Family Welfare (MOHFW) on 14<sup>th</sup> April reported 10,815 positive cases and 358 deaths covering 32 states in India. Fig. 1 shows the rapid increase of COVID-19 from January 30, 2020 to April 14, 2020. It is evident from the figure that spread of corona virus rapidly increasing after 15 March and started taking a horrible figure in the entire country.

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