

# COVID-19 Pandemic and Environmental Pollution



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## Abstract

Despite its adverse socio-economic impact, Covid 19 is a blessing in disguise for environment healing and reduce environmental pollution. Covid 19 is very effective in healing environment in short run. However, its effectiveness in long run depends on proper policies of the government and consumption patterns.

**Keywords:** Covid-19; Consumer durables; NO<sub>2</sub> emission; Mobility; Environmental degradation

**Jel Classification:** Q53; E2

## Introduction

Novel Corona virus was diagnosed by the scientists in Wuhan city in the end of December 2019 and which was later named as COVID-19 [1]. In January 2020, World Health Organization confirmed human to human transmission of COVID-19 through respiratory droplets [2]. On January 30th, WHO declared worldwide public health emergency. In February, Novel Corona virus started to outbreak in Iran, Italy, European countries, and United States. Consequently, the epidemic turns into pandemic and by mid of March, more than half of the countries of the world was under some form of lockdown [3]. On 16<sup>th</sup> April 2020, no. of COVID-19 cases exceeded 2.1 million all over the world, with more than 135,000 fatalities [4]. Moreover, not only transport sector but also industrial and manufacturing sector is seriously worsened by pandemic. Global oil demand dropped drastically, and prices reduced sharply, as industrial and transport sectors seriously affected worldwide. COVID-19 has drastically negative effects on human health and world economy to larger extent, however it also results in pollution reduction due to decrease in economic activities [5].

## Pollution assessment during COVID-19

Lockdown has reduced transport and economic activities due to COVID-19 and consequently, it results in less energy consumption and lower oil demand. The decrease in economic activities, reduction in transport changes and decrease in oil demand exert a substantial effect on the environmental quality. NASA (National Aeronautics and Space Administration) and ESA (European Space Agency) released fresh evidence which suggests

that environmental quality improved and the emission of NO<sub>2</sub> reduced up to 30% [6].

### China

The nitrogen dioxide (NO<sub>2</sub>) emissions are reduced up to 20-30% from February 10 to 25 during lockdown period. The satellite image was captured by ESA satellite Sentinel-5P using TROPOMI Instrument [7].

### Spain

The nitrogen dioxide (NO<sub>2</sub>) emissions decreased to 20 to 30% roughly in Spain due to lockdown, especially across big cities such as Madrid, Barcelona and Seville. The satellite image was captured by ESA satellite Sentinel-5P using TROPOMI Instrument [7].

### France

The nitrogen dioxide (NO<sub>2</sub>) emissions are decreased 25 to 30% approximately in France. The satellite image was captured by ESA satellite Sentinel-5P using TROPOMI Instrument [7]. NO<sub>2</sub> emissions decreased drastically during lockdown in the major cities of France due to transportation shutdown [7].

### U.S.A

The nitrogen dioxide (NO<sub>2</sub>) emissions concentration in northeastern part of United States during March 2020 is reduced to 30 % compare to that of March 2015 to 2019. Satellite image was captured by NASA through AURA satellite using OMI instrument [7].

## Italy

The nitrogen dioxide (NO<sub>2</sub>) emissions decreased drastically during lockdown due to transport shut down and reduced mobility. The satellite image was captured by ESA satellite Sentinel-5P using TROPOMI Instrument. NO<sub>2</sub> emissions across Italy is decreased to 20 to 30% roughly [7].

## Conclusion

COVID-19 is a global pandemic which is seriously detrimental to human health and reduced economic activities to large extent. Conversely, it is also "Blessing in Disguise", where air pollution is reduced due to severe lockdown and reduction in economic activities. This positive impact on environment may be temporary but pollution can be tackled in the long term with proper policies of the government.

## References

1. Chen H, Guo J, Wang C, Luo F, Yu X, et al. (2020) Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. *Lancet* 395(10226): 809-815.
2. (2020) WHO.
3. Tosepu R, Gunawan J, Effendy SD, Ahmad AI, Lestari H, et al. (2020) Correlation between weather and Covid-19 pandemic in Jakarta, Indonesia. *Sci Total Environ* 725: 138436.
4. World Health Organization (2020) Clinical management of severe acute respiratory infection when Novel coronavirus (2019-nCoV) infection is suspected: Interim Guidance.
5. Dutheil F, Baker SJ, Navel V (2020) COVID-19 as a factor influencing air pollution? *Environ Pollut* 263(Pt A): 114466.
6. (2020) NASA.
7. (2020) ESA.



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