

The Impact of the Pandemic Covid-19 on the Environment



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The unforeseen coronaviral disease (COVID - 19) has spread around the world and has affected 213 countries to more than 5 million people. Many cities and countries have gone for lockdown measures confining people to their homes and drastically reducing economic and social activities.

The lockdown measures are noticeably impacting the environment due to shut down of industries, factories, construction, schools and offices and reduced vehicular activity. People are less commuting all over the world due to travel bans, cancelled public events and tourism. The COVID-19 poses enormous health, economic, environmental and social challenges to the entire human population. The impact of the crisis will have far-reaching consequences. Environmental change is a big challenge of the 21st century. Enormous efforts are in place to restore the environmental standards. But in the last few months, the coronavirus lockdown has led to drop in pollution across the world. The contingency measures have improved air and water quality, clean beaches and environmental noise reduction.

The pandemic has halted both ground and air travel. Vehicular activity significantly contributes to greenhouse gas (GHG) emissions. The ramping down of industries and transport has reduced the release of GHG's and effluents,

lessening environmental pollution. The European Space Agency's Copernicus Sentinel 5P satellite has mapped changes in air pollution. Nitrogen dioxide (NO₂) is an important air pollutant produced due to human activities. Unlike other gases NO₂ has a short life span and satellite images reveal a reduction in NO₂ levels especially in urban areas and industries. A sharp reduction in GHGs and NO₂ concentration was first seen in China due to strict quarantine measures enforced in January. France, Germany, Italy, Spain and other countries also showed similar results as they enforced lockdown and social distancing. The major cities in India such as Delhi, Mumbai, Bangalore and others recorded massive reduction in NO₂ after the lockdown was put in place. NO₂ causes respiratory problems, coughing and aggravation of existing respiratory diseases like asthma. Visuals from NASA's Global Modelling show reduced emissions and dramatic reduction of smog in Los Angeles and many big cities of India. The impact of COVID-19 also resulted in reducing the ozone hole.

COVID – 19 restrictions have given residents of highly polluted cities an experience of clean air and blue sky. Air quality index (AQI) across cities has improved. However this improved air quality is not sustainable as it is the indirect impact of the virus on the environment.



Himalayan range from Jalandhar

<https://www.tribuneindia.com/news/punjab/coronavirus%C2%A0jalandhar-residents-have-a-rare-view-of-snow-capped-mountains-65028>

Beaches around the world have cleaned up due to social distancing measures. It has also reduced the quantity of solid waste accumulation on the beaches. Lack of tourism has resulted in clean beaches with crystal clear waters. The quality of river waters showed remarkable improvement

during the lockdown period. The Ganga water quality at 27 points was suitable for domestic use. The dissolved oxygen (DO) values showed an increase and the pH was alkaline. Delhi Pollution Control Board found improvement in the quality of Yamuna river water.



River Ganga in Haridwar

<https://www.indiatoday.in/india/story/lockdown-impact-ganga-water-in-haridwar-becomes-fit-to-drink-after-decades-1669576-2020-04-22>

The COVID-19 pandemic has resulted in spotting a number of birds and other animals. People did not have time to observe these creatures which coexist with us. Now that they have lot of time in hand thus have started observing them. Many bird species have

extended their stay at the Therthangal and Melaselvanoor – Keelaselvanoor bird sanctuaries. Spotted deer and peacocks were seen in good numbers in Thoudi and Thiruvadurai recently. A civet cat was spotted in Meppayur in Kozhikode district. Wild elephants parading through Wayanad town, dolphin by the



A small Indian Civet

<https://theprint.in/opinion/pov/animals-have-come-home-covid-19-lockdown-gives-control-back-into-natures-hands/395218/>

Mumbai sea shore and peacocks strutting about through backyards are all being attributed to the COVID – 19 lockdown. Olive ridley turtles were found in mass nesting in Odisha's Rushikulya Rookery and Gahirmatha Beach. Though day-nesting is uncommon, this is being seen after 7 years ascribed to lack of tourists. Birds are breeding on the sea shore with higher success rates. Navi Mumbai witnessed an increase in migratory flamingos.

The lockdown has also resulted in a drastic reduction of noise pollution. With empty roads and closed industries the noise pollution has fallen by nearly 50-70% in Kolkata as the data received by the West Bengal Pollution Control Board. People are waking up to the chirping of birds, fresh air and clear skies. Many people said they have seen and heard different kind of birds due to less noise pollution. Honking of vehicles is the biggest polluter where the noise levels shoot up to 100db and more. Central Pollution Control Board has reported significant drop of noise pollution in many residential and commercial places of Delhi.

The COVID-19 pandemic has already had tremendous impact on the waste sector. Waste management is an essential public service and should be continued as usual in order to minimize the possible secondary impact upon health and the environment. During this time additional medical and hazardous waste are generated including infected masks, gloves and other protective equipments. Some companies have shifted to single-use packaging and online ordering of food has resulted in an increased quantity of both organic and inorganic waste.

COVID-19 has revealed our vulnerabilities and has taught us lifelong lessons. It is important for the world to realize the significance of maintaining the habitats of animals. It is very essential to maintain our forests, wetlands, oceans and other ecosystems. If wild animals have their habitat, most zoonotic disease won't pass to humans. The outbreak of COVID-19 was at the Huanan seafood wholesale market in Wuhan, China. In the wildlife markets of China trade animals such as snakes, porcupines, baby crocodiles, civet, bat, wolf pup, pangolin and so



The India Gate – Then and amidst lockdown

<https://edition.cnn.com/2020/03/31/asia/coronavirus-lockdown-impact-pollution-india-intl-hnk/index.html>

on are marketed. Buying, selling and killing of wild animals is one of the ways of a zoonotic virus jumping to people due to close proximity. The unrestricted wildlife trade might enhance the risks of emerging new viruses. The global wildlife trade including the open animal market should be permanently banned. The COVID-19 has emphasized on improving the mutual relationship between humans and animals. The novel coronavirus is signalling a catastrophic imbalance and it is crucial to respect the carrying capacity of nature, before it is too late. The positive impacts of the pandemic on the environment are temporary and unsustainable, hence should not be contemplated. The International community should focus on the impacts of climate change and commit for taking action on environmental issues for healthier and safer future. The unwanted COVID-19 taught good lesson to humans that if we protect the environment, the environment will protect us. Desired periodic shutting down of all human activities is one of the measures could be followed immediately to save our nature up to

some extent.

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