

## **Covid-19: The Upside of Lockdown**

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### **Introduction:**

Man: the most intelligent animal is regarded as the youngest species on the Earth. His journey (Hominini) that began about six million years back is full of adversities. During his journey, nature was very cruel and harsh. He had faced challenges such as Biological, Climatological, Geological, Hydrological, and Meteorological. Despite of odd circumstances he overcame them.

In the last 120 years, in 221 countries of the world, man has faced 13,757 Biological, Climatological, Geological, Hydrological, and Meteorological disasters with 3,25,83,037 deaths. About 40 per cent of the disaster (5469) and 80 per cent of the deaths (2,61,83,130) occurred in Asia alone.

Following Table 1 depicts some of the important biological disasters faced by the humans:

Table 1  
Biological Disasters

Period	Name of the Diseases	No. of deaths	Area of spread
165-180 CE	Antonine Plague	5 million	Mediterranean World
541-542 CE	Plague of Justinian	50 million	China and North East India
1347-1351	Black Death	200 million	Around Black Sea
1665	Great Plague of London	1 lakh	England
1918-19	Spanish Flu	50 million	1/3 <sup>rd</sup> World including USA
1981	HIV/AIDS	25-35 million	Entire World
2002-2003	SARS (SARS-COV)	774	China
2014-2016	Ebola	11000	West Africa
2015	MERS (MERS-COV)	850	Saudi Arabia

Source: inshort

### **Objectives of the Study:**

This study is carried out with a single objective i.e., to discover the positive influence of lockdown on the Environment.

### **Data and Methodology:**

As a result of lockdown, this study is predominantly based on secondary sources of information. Most of the information is collected through online sources.

### **Novel Corona Virus Diseases-19:**

Corona viruses belong to a family of viruses that are responsible for common cold like situation resulting in upper-respiratory tract illnesses with different intensity like the. Corona viruses are found in both humans and animals.

Bats, Camels, Cats, Pigs and other animals carry hundreds of corona viruses. Sometimes due to human interactions these strains jump to humans and result in disease. Corona viruses among the domesticated chickens was discovered for the first time in the 1930s whereas, about 30 years after i.e., in 1960, corona virus was discovered in human.

According to scientists, there are seven known corona viruses, four of which can cause serious health issues. They are as follows:

- 229E (alpha)
- NL63 (alpha)
- OC43 (beta)
- HKU1 (beta)
- MERS-CoV
- SARS-CoV
- SARS-CoV-2 (COVID-19)

The first Covid-19 case was detected in India in Kerala on 30 January 2020, whereas world's first case was detected on 17 November 2019 in Wuhan City of China. Due to many fold increase in cases of Covid-19 in a very short period of time, World Health Organization declared this emergency as global pandemic.

A virus of a size of 125 nm has forced the entire Planet to shut. This kind of total shutdown involving 7000 million people has never happened in the past. Coronavirus has badly affected all the sectors of economy irrespective of developed or developing countries. Millions of people have been displaced, lost their livelihoods and large scale migration of workers back to their villages is taking place, where migrants are forced to walk on foot hundreds of kilometers without basic necessities.

As on 24 May 2020, the world was infected with 54,17,932 Covid-19 cases with 3,44,196 deaths. United States of America alone accounted for 31 per cent of the global cases (16,66,828) with 28.67 per cent of the deaths (98,683). (worldmeters).

It is evident from the following table 2 that the Covid-19 cases are widespread in Europe (34.97 %) and it also accounted for almost half of the deaths (49.23) of the World. It is interesting to note that the prevalence of Covid-19 in Africa is very less. Otherwise, when it comes diseases Africa is most prone but not in case of Covid-19.

Table 2

Continent-wise distribution of Covid-19

Continent	% of Cases	% of Deaths
Europe	34.97	49.23
North America	34.25	32.96
Asia	17.36	7.87
South America	11.20	8.93
Africa	02.00	0.95
Oceania	00.16	0.04

*Source: Based on data gathered from Worldmeters*

In India despite of lockdown from 25<sup>th</sup> March 2020 onwards, the cases are growing rapidly. With a single case on 30 January 2020, cases increased to 519 on 24 March 2020. Similarly, cases increased to 5864 on 9 April 2020. On 7 May 2020, it further increased to 52952 cases. 19 May 2020 there were as many as 101139 cases in India and on 24 May 2020 the figure climbed to 1,32,029. Currently cases in India are growing at a rate of 5-6 percent per day and double in 13 days. India account for only 2.43 per cent of the world infections and 1.12 per cent of the deaths (worldmeters).

Various countries of the World are busy in carrying out impact Covid-19 on their economies but only a few efforts are made to understand the positive effects of Covid-19 on Environment and Wildlife. This paper is an attempt to study the benefits of Covid-19 on the Nature.

## POSITIVE IMPACT OF COVID-19 ON ENVIRONMENT

### 1. Improvement in the Air Quality:

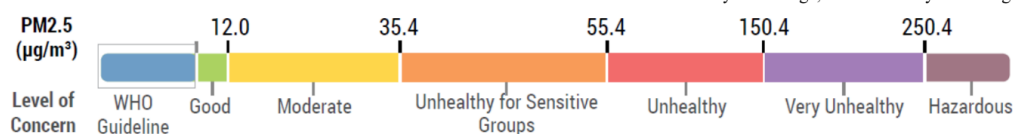
For a very long time, human beings are living in a contaminated world. The poor quality of air has resulted into thousands of premature deaths globally. According to the WHO Report 2016, air pollution is accountable for nearly 8 per cent of total deaths in the world.

As a consequence of global lockdown; industries, transport, trade, commerce, movement of people came to a halt and suddenly world appeared cleaner with exceptional blue skies. Following Table 3 shows the Air Quality during lockdown periods in the ten most polluted cities of the world prepared by IQAir as a part of Covid Air Quality Report 2020:

Table 3 Air Quality in selected Cities

City	Average PM2.5 during lockdown 2020 (/m3)	Reduction compared to 2019	Reduction compared with prior 4 year average	3 week lockdown dates, 2020
Delhi, India	32.8	-60%	-55%	Mar 23-Apr 13
London, UK	16.2	+09%	+06%	Mar 23-Apr 13
Los Angeles, US	05.5	-31%	-51%	Mar 23-Apr 13
Madrid, Spain	06.4	-11%	+02%	Mar 23-Apr 13
Mumbai, India	28.8	-34%	-43%	Mar 23-Apr 13
New York City, US	04.4	-25%	-29%	Mar 23-Apr 13
Rome, Italy	16.7	+30%	No data available	Mar 09-Mar 30
Sao Paulo, Brazil	10.1	-32%	-26%	Mar 23-Apr 13
Seoul, South Korea	21.1	-54%	-32%	Feb 26-Mar 18
Wuhan, China	35.1	-44%	-50%	Feb 03-Feb 24

Data for Sao Paulo is based on a 3-year average, rather than 4-year average



Source: Covid Air Quality Report, IQAir 2020

It is evident from the above table 3 that except Rome, all the other cities have witnessed drop in PM2.5 both in comparison to same period in 2019 and 4 years average. New Delhi benefitted maximum from the lockdown showing a maximum reduction atmospheric particulate matter (PM2.5) by 60 percent in comparison with 2019 and 55 percent in comparison with last four years average. Similarly, Mumbai also experienced reduction in PM2.5 but comparison with New Delhi results were not satisfactory.

In India due to lockdown, all major and minor cities experienced best air quality in March, April and May. Since, the lockdown is partial lifted and industries have started their production, hence, the above statistics may change soon.

### **2. Reduction in Carbon Emission**

United Nations Organization is working day in and day out to reduce Carbon emissions across the globe. It has formulated numerous frameworks but countries are unable to meet the set targets. Never mind because according to the research paper published in the Journal Nature Climate Change, global lockdown has caused significant reduction in daily releases of GHG by 17% by equated with 2019 levels. This is a good sign for the good health of Earth and human beings.

### **3. Reduction on Noise Pollution**

Noise can be defined as unnecessary, unpleasant, or intolerable sound, whereas any sound, which is tolerable and sweet, is called 'music.' Human beings cannot hear anything that is less than 20 kilohertz, but animals can hear anything less than this.

Industries, construction works, advertisements, elections canvassing, generators, televisions, mobiles, telephones, automobiles, festivals rails, etc. largely create the noise pollution. The upper limit of human tolerance to sound is 110 decibels. The upper noise intensities are very harmful and troublesome for normal life. It has been calculated by the scientists that the street traffic causes 60-90 decibels and the mobile ring tone causes 90 decibels. Following table 4 shows important noise makers and the level of noise they create:

Table 4  
Noise Levels

<b>Noise created in decibels (dB)</b>	<b>Type of sound</b>
10	Breathing
20	Wind in the trees
20-30	Quiet conversation
30.	Tickling clock
50-60	Radio music
60	Loud conversation
60	Office noise
60-80	Children playing
60-90.	Traffic noise
80-95	Sports car
90-100	Heavy truck traffic
110	Thunder storm
120	Beat music electrically amplified

90-120	Aircraft noise
120	Jet take off (at 100m distance)
140 db	Jet engine (at 25m distance)
140-170 db	Space vehicle launch (from a short distance)

*Source: Manorama Year Book, 1997.*

Noise Pollution is one of the main causes of uneasiness for humans, animals and environment alike. Partial deafness, permanent deafness, irritation, loss of concentration, decrease in work efficiency and other physiological disorders are some of the end results of sound pollution on man.

With the imposition of lockdown and quarantine, people were forced to stay at home and human activities decreased resulting into substantial drop in noise levels across all cities. During lockdown period societies were in peace with less stress.

#### **4. Improvement in Water Quality**

India is land where rivers are worshipped. Among all the rivers of India, rivers Ganga and Yamuna are viewed as the divinest of the divine and a dip in river Ganga achieves Moksha gets rid of sins. Overall the years, due to industrialization and urbanization these rivers are highly polluted and at many places their water is not suitable for drinking purpose.

The Modi led NDA Government took the reins of India in 2014 and renamed Ministry of Water Resource as Water Resources, River Development and Ganga Rejuvenation. To bring life back into river Ganga a new scheme was introduced namely NamamiGange with a financial allocation of Rupees Twenty Thousand Crores for five years. Similar efforts were also made by the earlier Governments but River Ganga could not be cleaned.

Similarly, a study, published in International Journal of Engineering Sciences & Research Technology, states that River Yamuna is 'close to death' water is 'toxic' even after treatment and should not be used for drinking or irrigation.

Lockdown acted a blessings in disguise. Due to absence of industrial pollutants and garbage, the quality of River Ganga and River Yamuna has improved unbelievably. At many places it was suitable for drinking purpose. What Governments could not achieve in last so many decades, lockdown made it happen in just weeks.

#### **5. Sparkling Beaches**

Nature has gifted India with 7516.6 km of shoreline which passes through states of West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra and Gujarat. India's coastline is dotted with some of the beautiful beaches. When we think of Goa, we think of golden beaches. Goa has more than 33 enthralling beaches with 80 lakh footfalls which indicates that they are over-crowded. Due to trampling by lakhs of tourists, the coastal vegetation on the beaches, sand dunes and berms gets destroyed resulting into erosion. For the last 50 days these beaches were free from any torture and getting rejuvenating.

#### **6. Spotting of Wildlife**

People pay visits to wildlife sanctuaries and National Parks with an intention to see animals in wilderness but many a times we are not fortunate. After days of trekking, we end up seeing few monkeys and birds. When humans were locked in the houses, many wild animals were freely roaming in our towns, cities and villages. Following are some of the important breathtaking incidences:

- A Deer crashed through roof in Mumbai in Mahatma PhuleChawl.
- Black Panther was spotted in Goa. It was first time captured in Camera.
- Sloth Bear was spotted in Cashew Plantation in VajrapuKotturuMandal in Andhra Pradesh.
- Thousands of migratory flamingoes flocked to Navi Mumbai Creek
- Leopard attacked truck drivers in Hyderabad in broad day light
- Dolphins appeared near Mumbai shores
- The elephants stroll through Dehradun
- Herd of Deers was found on a highway in Japan
- Whales were spotted in Indonesia
- A Sambar deer was spotted in Chandigarh
- In Kozhikode, a critically endangered civet was spotted.
- Nilgai was freely trotting in Noida
- One horned rhino ambled in near Guwahati
- Deer was spotted in Tirupati
- Black Panther was spotted after seven years in Chhattisgarh

Similarly, wild animals and birds were also spotted in other parts of the world.

It was observed during the nationwide lockdown that population of birds and butterflies surged significantly across the country. People every day woke up to tweeting and chirping of birds.

## **7. Himalayan Magic**

Himalayas are the youngest folded and the tallest mountains in the World. They are believed to be 70 million years old. Himalayas are as beautiful as Alps. Kashmir, Himachal and Uttarakhand are more scenic and eye-catching than Switzerland. One who visits Himalayas will surely be infatuated withHimalayas. Our earlier generation living in Punjab, Haryana, Bihar and West Bengal had an opportunity to see charming and captivating Himalayas from hundreds of kilometers but due to air pollution Himalayan view vanished during our times.

The current generation is fortunate enough to witnesses Himalayas from far distance as a consequence of lockdown. There are reports that Mount Everest was visible from Kathmandu after years from a distance of 200 km. Similarly, Mount Everest was seen from Bihar's Singhwahini after decades. People in Saharanpur, Jalandhar could see snowy peaks of the great Himalayas. From Siliguri in West Bengal one could see the most prominent peak of Himalayas the Kanchenjunga. People of Saharnpur had an opportunity to see Gangotri from their rooftops.

## **8. Decrease in Solid Waste**

About 7000 million people are locked in houses for the last 60 days. During this time, the production and supply chain has badly affected. It was observed that during this pandemic time people are managing their daily chores with basic necessities. Hence, it can be established that there is a considerable fall in the generation of solid waste.

### **Conclusion:**

There are many depressing stories of lockdown especially in India. The migrant workers walking on foot, bicycle, and auto rickshaw from different parts of India to Uttar Pradesh and Bihar without food and water. There are instances of women giving birth on the roads. Many migrant workers have died on the way to their homelands due to starvation and dehydration. These are distressing and terrifying stories.

The positive side of the global lockdown in the wake of coronavirus pandemic is healing of the earth. To give therapeutic treatment to the bleeding earth, we must ponder on declaring lockdown of world at least for one week in first half of the year and another week in the second half of the year.

Governments, across the world are spending in billions of dollars to protect health of their citizens from air pollution, water pollution, carbon emission, wildlife conservation etc. The total loss incurred in the wake of lockdown may be less than what Governments spend on above problems.

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