

Lockdown and Its Impact On Global Environment : A Survey Report

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Abstract

Covid-19 pandemic has influenced the natural environment in many ways. The numerous national and international lockdowns has both positive and negative effect on wildlife. This pandemic and resulting limitations imposed to fight the spread of the disease have nurtured some positive impacts on worldwide environment. These comprises of temporary improvement in the air quality, less noise pollution and least gas emissions. On the other hand the world also stresses that there are few negative consequences due to this pandemic such as focusing on reshaping our unsustainable production and consumption systems to attain long-term environmental benefits. The Covid-19 pandemic should shove us all to rethink our communication with nature and wildlife.

Covid-19 and its associated lockdown has provided us as a rare opportunity to step back and evaluate the influence on the environment. We are observing clean air quality, clear water and the cities where we can live happily as we have demanded for so long precisely because we have been shut away. Thus to attain all this we should make a commitment to instill such principles to make our environment clean and sustainable.

Keywords: Covid-19, Pandemic, Environment, Wildlife, Lockdown, Globalisation.

Introduction

Environment as the term itself indicates, is anything immediately surrounding an object and exerting a direct influence on it. The role of environment is so great that it can effect our society and our behavior. The natural environment encompasses all living and nonliving things occurring naturally, meaning, in this case, is not artificial. The term is most often applied to the Earth or some parts of Earth. This environment encompasses the interaction of all living species, climate, weather and natural resources that affect human survival and economic activity.

Environment of both the types- geographical and social or natural and man-made has a tremendous bearing on human personality. The natural environment sets limits to the personality and also provides opportunities for its development. The social environment provides enough conditions for its proper expression.

Coronavirus (covs) are a group of viruses which affects human beings through zoonotic transmission. On January 12, 2020, WHO found that coronavirus was the reason of the infection in Wuhan and later on 11th February WHO announced this Novel COV as 'COVID-19. In India the first confirmed positive case was reported on 30th January in Kerala. Till then the spread of coronavirus became rapid after 15 March till now and started taking a horrible shape in the entire country.

India terribly effected by corona which has paid a heavy fee for this improvement in phrases of toxin the air we breathe. As in keeping with Press launch of World Health Organization (2nd May 2018) round 7 million human being die each twelve months from publicity to first class debris in polluted air. When we look at the records of State of India's Environment (SOE) 2019, we found on air quality, that's being skilled with the aid of using anyone and recorded in various legit reports.

Statement of the Problem

Pandemics and the environment have a close relation. Throughout history epidemics have caused large-scale deaths, reducing human influence on the environment. Europe's Black Death which killed about 20 million people during 1347-51 led to a drastic reduction in toxic lead pollution in the air for the first time in over a thousand years.

Researchers also believe that the Anthropocene-age of the humans- started with an epidemic. This epidemic which happened around 1610 and killed more than 50 million people in Latin America, was caused by the transmission of the smallpox virus from Europeans to the native population.

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The impact of this epidemic was so significant that atmospheric CO₂ levels in 1610 dipped dramatically from the normal. Researchers have named this dip 'Orbis Spike'. Most of the people who died were farmers, when their fields were no longer tended, trees grew back and sucked CO₂ out of the atmosphere. Lower CO₂ levels led to the cooling of the planet and triggered a 'little ice age'. For the first time human activity had planetary implications; hence till the beginning of the Anthropocene. But it is clear from history that environmental changes during pandemics have been short lived. The epidemic of 1610 also paved the way for large scale European settlement in Latin America. These settlers destroyed the environment especially forests, to feed the raw material needs of the colonies. Likewise lead pollution in Europe peaked in the 1970s and 80s. So there is no historical evidence that points to humans actively mending their ways after a pandemic to relish a clean environment. On the contrary, post pandemic periods seem to have led to large scale exploitation of nature to fuel economic growth.

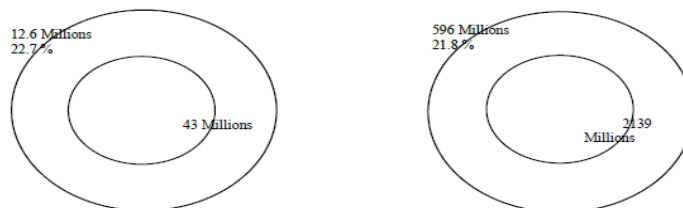
The environmental improvements that are witnessed due to Covid-19 are also short term if fundamental changes are not done in the economy and people's life styles. Fortunately, there is an opportunity to make these structural changes.

The general tendency of governments will be to bail out companies and boost consumption to stimulate economic growth. This strategy, though popular in the short term, will strengthen an economic system that will lead to a much bigger crisis than Covid-19 such as climate breakdown and biodiversity collapse.

Air pollution in India hit record high levels forcing schools to close and flights to be diverted. Other cities in northern India also suffered after a few months from pandemic, the skies became clear. The impact of living in such badly polluted conditions has left a hidden problem for residents; a potential vulnerability to the coronavirus pandemic-a severe respiratory disease.

Among the world, India accounts for the highest respiratory disorders along with tuberculosis cases. Such huge widespread lung disease could probably grow the danger related to the coronavirus. Among younger generations too there are excessive level of respiration disorder which is a great concern to the country .They are now depend on nebulizer because of asthma which has adopted a common place inside every family. According to the WHO, older people and those with pre current clinical conditions, consisting of asthma, looks like a maximum threat of turning into serious condition with the virus. Globally, deaths related to air pollution are of pandemic proportions, with 7 million deaths every year.

WHO Fraction of deaths and DALYs attributable to the environment globally, 2012
Deaths (Millions) DALYs (Millions)



Source :Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. WHO, 2016.

In 2012, 12.6 Million people died as a result of living or working in an unhealthy environment, representing 23% of all deaths. When accounting for both death and disability the fraction of the global burden of disease due to the environment is 22%. In children under five years, up to 26% of all deaths could be prevented, if environmental risks were removed 68% of these attributable deaths and 56% of attributable DALYs could be estimated with evidence-based comparative risks assessment methods, the impacts of other environmental exposure were assessed through expert opinion.

The Coronavirus crisis also prevents India with an opportunity to invest in a clean energy future.

Objective of the Study

1. The present article eventually worked on the direction to look upon the air quality scenario amidst the lockdown period.
2. How government and people come together to preserve the environmental gains of the lockdown.
3. On a global scale lockdown has a clear and positive effect on the environment.
4. To study the implications of Covid-19 for the environment and sustainability.

5. To study the challenges of post-Covid environment.
6. To study how will Covid-19 lockdowns generate public support for climate change mitigation?

Review of Literature

The manner wherein Covid-19 has quarantined maximum social and financial hobby, is being referred to as the world's biggest scale test ever. When the quarantine protocols are lifted, records accumulated all through this test ought to assist construct higher societies and economies. One extremely good place wherein new baselines of what's viable have emerged is the environment. Specifically, recollect the lockdown record playing cards of India's rivers. From Ganga to Cauvery components of our essential rivers have mentioned dramatic improvements in water quality, becoming suit for consumption for the primary time in decades. No mining, no manufacturing, no business hobby method, no business business discharge. This makes for fast and interesting facelifts in towns like Kanpur that have numerous polluting corporations alongside the river. Of route the fitness of the state desires such sports to resume, and develop ever more potent than earlier than. But that doesn't suggest we have to pollute our rivers again. Several nations were enforcing business wastewater remedy strictly for 1/2 of a century now and India desires to sign up for their ranks on the soonest. It desires to shield rivers shape untreated home sewage as well. The 34% discount in faecal coliform mentioned from a Haridwar ghat in April, can be as a consequence of the paralysis of tourism, suggesting how appallingly human excrete are commonly allowed to pollute the holy Ganga. Knowing what desires to be carried out is one thing, doing it's miles some other however

The Central pollution control board (CPCB) reported that Ganga during the lockdown period- India's national river has become cleaner.

In fact, clean enough to support aquatic life and allow you to take a dip without facing any health risks.

Though the river water still cannot be used for drinking purposes unless it's chemically treated, the visible difference is, at health in sync with what the CPCB found through its analysis of pollution loads in Ganga during the period prior to the lockdown and now.

The country's countrywide pollutants watchdog in its file says " the nationwide lockdown has ended in typical typical development in water best of river Ganga mainly in regards to expanded dissolved Oxygen (Do) and decreased nitrate concentration." This approach the water best of the complete river stretch from Uttarakhand to West Bengal has attained the washing widespread and have become organically wealthy sufficient to assist aquatic life. The file additionally indicates that the water best of the river stretch in Uttar Pradesh has visible a better development in comparison to what its stretch in West Bengal witnessed. Though the Biochemical Oxygen Demand (BOD) stage a key indicator of natural pollutants is nonetheless an awful lot better in lots of stretches in U.P. than its stage in West Bengal, the previous has visible extra development. U.P. has extra industries than West Bengal. So, shutting down of industries approach no discharge of business effluent withinside the river withinside the State. Though each the states maintain to get a home discharge, extra water from river stretch in U.P. to get wiped clean to an quantity naturally. Water best withinside the higher reaches of the river in Uttarakhand (till Haridwar-Rishikesh) is relatively cleaner than the opposite stretches in 4 states U.P., Bihar, Jharkhand, and West Bengal. For the BOD stage the file in its end says, "Reduction in BOD concentration has been much less great proudly owing to persistent discharge of untreated or inadequately dealt with sewage. Further, there's a sluggish boom in BOD stage toward downstream stretches of the river with the most values withinside the West Bengal stretch." Besides the river Ganga, the CPCB additionally analysed pollutants ranges of its tributaries and located that the water best traits of tributaries is "just like the traits found in river Ganga." At present, home wastewater from ninety seven cities and business effluent are the foremost supply of water pollutants withinside the Ganga, with an predicted amount of 3,500 MLD (Million Litres in keeping with Day) of sewage, out of which 1, a hundred MLD is dealt with and closing 2,400 MLD receives discharged untreated. Industrial effluent is, but predicted to be approximately 300 MLD, which is ready 9% of overall wastewater being discharged into the river each day.

Ganga gets a life during Lockdown.

1. CPCB analysed pre-lockdown (March 15-21) and lockdown (March 22- April-15) periods data for the report.
2. Data were taken from 36 real-time water quality monitoring

stations. Concentration levels for Dissolved oxygen (DO), Biochemical Oxygen Demand (BOD) Chemical oxygen demand (COD), Nitrate (No₃) and Ammoniacal Nitrogen (NH₃-N) were examined.

3. BOD level is a key indicator of organic pollution.
4. Water bodies having BOD more than 3mg/l are considered polluted.
5. More than 3mg/l of BOD doesn't meet the desired water quality standard, but it doesn't affect DO level in water bodies.
6. If BOD exceeds 6mg/l in water body, the dissolved oxygen (DO) is reduced below desired levels.
7. Low DO level affects aquatic life.

Published recently in the U.K. headquartered scientific journal Nature Climate change, the research shows that daily emissions decreased by 17% or 17 million tonnes of carbon dioxide globally, during the peak of the confinement in April, dropping to levels observed in 2006.

In India, the maximum emission drop was 26% "Government policies during the Covid-19 pandemic have drastically altered patterns of energy demand around the world." The decrease in activities led to a significant drop in daily CO₂ emissions from different sectors. While emissions from surface transport accounted for almost half (43%) of the decrease in global emissions those from industry and power together accounted for a further 43% of the decrease in daily global emissions. The aviation sector is the most impacted by the confinement, but its emissions account for only 3% of global emissions or 10% of the decrease in the global emissions during the pandemic. According to the analysis the impact of confinement on annual emissions in 2020 is likely to lead to the largest single annual decrease in absolute emissions since the end of World War II.

However, as per the authors, the decrease in emissions this year will not do much to impact climate change as the reduction is "extremely small compared to the emissions accumulated so far and compared to the emissions cuts needed to tackle climate change." The authors want that the rush for economic stimulus packages must not make future emissions higher by delaying new green deals or weakening emissions standards.

Lead creator Corrinna Le Quere of the University of East Anglia (Norfolk, UK) says "Population confinement has brought about drastic modifications in electricity use and CO₂ emissions." These excessive decreases are possibly to be transient even though as they do now no longer replicate structural modifications within the monetary, transport, or electricity systems. "The volume to which international leaders keep in mind weather alternate while planning their monetary responses publish Covid-19 will impact the worldwide CO₂ emissions paths for many years to come."

Methodology

The study area for this research is India where the information has been collected from the daily articles coming in different newspapers of the country especially of Uttar Pradesh. Steps were also taken from studies of various parts of the world which negatively influenced the economy of those countries but had a positive impact on overall air quality.

Conclusion

What Policy Can Do

1. Continue to enforce existing air pollution regulations during the Covid-19 crisis and after the crisis.
2. Develop comprehensive strategies to achieve air quality objectives, including thorough better integration of land use planning, transport and environmental policies, implementing economic instruments to address pollution from mobile and stationary sources, and improving data collection and quality across monitoring networks.
3. Channel financial support measures to public transport providers to enhance capacity and quality (with focus on reducing crowding and promoting cleaner facilities.)
4. Encourage companies to continue to develop cleaner production methods, in particular with respect to emissions air pollutants, and strengthen the use of economic and regulatory instruments to support such developments.
5. Clearly communicate the need to ensure proper ventilation and indoor air quality during confinement, especially in areas heading into winter and those relying on wood burning. After the Covid-19 crisis, support the diffusion of cleaner heating and cooking systems to improve resilience to possible future epidemics.
6. Some steps should be taken to design a stimulus package that bails out people and the environment. There should be some agenda for rebooting the economy.
7. Green package: The massive government investments in infrastructure technology and business bailout should align to stabilize the climate system, preserve biodiversity, and ensure water security. Nature restoration program: In India, we will see massive joblessness, and hence programs like MGNREGA will play a critical role in supporting livelihoods. We should use MGNREGA for ecological restoration projects related to land, water, and forest.
8. Invest in global cooperation and institutions: Covid should not be used as an excuse for anti-globalization to share knowledge, technology, and values. Similarly, we need unprecedented global cooperation to solve crises like climate change and the next pandemic.

If the coronavirus pandemic teaches us anything, it is that taking nature for granted has enormous costs. On the 50th anniversary of Earth day, let's remind ourselves of the massive environmental challenges that lie ahead and invest in building a resilient society, economy, and ecosystem.

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