

IMPACT OF COVID-19 ON ENVIRONMENT

Shivshankar Meena*

ABSTRACT

The outbreak of Covid has unpredictable and unprecedented impact the economy throughout the world and India isn't in the least an exception to the present. The whole world was under lock down for many days. The measures taken to regulate the spread of the virus and therefore the slowdown of economic activities have significant effects on the environment. This Research work has been undertaken to find out the all kinds of impacts of Covid19 on the environment, using available literature on subject matter. This research work is indicating the covid 19 has greatly improved the quality of air system of nature throughout the world, reduction in Green House Gases has occurred, Pollution of all kinds has reduced, and unusual pressure on tourist places like hilly areas has decreased which will help us in restoration of the ecological system. Apart from above there are certain negative impact of Covid 19 such increasing in medical and haphazard waste, various infected material such as gloves, masks, untreated medical waste, which is making danger to environment continuously. It is also probable that economic activities will return soon after the pandemic, and also the situation might change. Hence, this study also outlines possible ways to realize long-term environmental benefits. The correct way of implementation of the proposed recommendations could be helpful for the sustainability of the environment.

Keywords: *Environment, Sustainability, Pollution, Pandemic, Transmission, Strategies.*

Introduction

This Research Paper discusses the economic impact of the COVID-19 crisis on environment in India further at global level. The introduction of corona Virus has impacted extremely worst on the Environment throughout the world. However we've got also seen various positive impact of such pandemic on environment. The impact of Covid is so serious that the world health organisation has declared it as a virulent disease. It had been started from china, the whuan city which was the key source of this virus. It then spread whole over the world, but in beginning there was little or no signs of community transmission. The amount of people who got effected by this was quite less in number. The Covid has disrupted the whole world and has come out with sever impacts on environment and climate. Due to movement restriction and a big slowdown of social and economic activities, air quality has improved in many cities with a discount in pollution in several parts of the planet. Besides, increased use of PPE (e.g., face mask, hand gloves etc.), their haphazard disposal, and generation of an enormous amount of hospital waste has negative impacts on the environment.

Environment Impact of Covid 19

Some of the positive impacts of Covid 19 on Environment

- **Reduction of water pollution:** pollution is a common phenomenon of a developing country like India, and Bangladesh, where domestic and industrial wastes are dumped into rivers without treatment. During the lockdown period, the main industrial sources of pollution have shrunk or completely stopped, which helped to cut back the pollution load. As an example, the river Ganga and Yamuna have reached a big level of purity because of the absence of commercial pollution on the times of lockdown in India. It's found that, among the 36 real-time monitoring

* Assistant Professor in Geography, Government Girls College, Sikandra, Dausa, Rajasthan, India.

stations of river Ganga, water from 27 stations met the permissible limit. This improvement of water quality at Haridwar and Rishikesh was ascribed to the sudden drop of the quantity of holiday makers and 500% reduction of sewage and industrial effluents. Except total coliform in some monitoring stations, all others parameters even meet the national potable quality standard, which might be used without conventional treatment but after disinfection (Class A).

- **Reduction in Air Pollution:** the quarantine and lockdown measures mandate that individuals occupy home and reduced economic activities and communication worldwide, which ultimately reduced background level in most cities. As an example, amplitude of Delhi the capital of India, is reduced drastically around 40–50% in the recent lockdown period. Consistent with the Central Pollution panel of India, amplitude of residential district of Delhi is reduced 55 dB (daytime) and 45 dB (night) to 40 dB (daytime) and 30 dB (night) respectively. Moreover, due to travel restrictions, the amount of flights and vehicular movements have drastically reduced round the world, which have ultimately reduced the extent of pollution.

Some of the Negative environmental effects

- **Increase of biomedical waste generation:** Since the outbreak of COVID-19, medical waste generation is increased globally, which may be a major threat to public health and environment. For sample collection of the suspected COVID-19 patients, diagnosis, treatment of big number of patients, and disinfection purpose plenty of infectious and biomedical wastes are generated from hospitals. Such a sudden rise of hazardous waste, and their proper management has become a major challenge to the local waste management authorities. Consistent with the recent published literature, it's reported that the SARS-CoV-2 virus can exist every day on cardboard, and up to three days on plastics and chrome steel. So, waste generated from the hospitals (e.g., needles, syringes, bandage, mask, gloves, used tissue, and discarded medicines etc.) should be managed properly, to scale back further infection and environmental Pollution which is a global mater now.
- **Safety equipment use and haphazard disposal:** From saving ourselves we all are using mask, PPE kits and hand gloves. However this increases the health care waste at mass level. Because of this the environment soon will be filled with a lot of such hazardous medical waste. People do not have any knowledge regarding disposal of such waste and their management of infectious wastes, and hence they dump it in public places. This will make water and environment pollution at the most dangerous level.

Objective of Study

As we discussed that Covid19 pandemic has stressed the whole world. The impact is extremely sever and immeasurable, further as unpredictable. The environment has totally changed in this pandemic and Lockdown period world wide. Hence this Research has been undertaken with the subsequent objectives

- To understand and highlight the effect of Covid 19 on Environment.
- To analyse and highlight the our Strength to cover and fill the losses to environment,
- To debate how India could help the world in sustaining the environment back to better position.
- To search out out the challenges existing within the difference sectors,
- To suggest strategies and proposals this could be adopted by all of us to bring the situation normal.

Review of Literature

Girish Jadhav (2020) The researcher has briefly described the impact of Covid. He has begin with growth Projections which are revised towards down side. In his research he has given some recommendations to realize attention of Policy makers of the India to assist them intent on cater the severity of Corona.

Nuno Fernandes (April, 2020) The study has been undertaken to measure the impact of Covid on world economy and environment. However the one better part of the research was to describing that no correlation exist between deathrate and Economic impact. This perhaps never been studied by any researcher. They also clear that the environmental impact of Corona shall not be compared with its quite other flues occurred previously as because their impact wasn't Global like Covid 19.

Mahindra Dev and Rajeshwari Sengupta (2020) had highlighted the impact of Coronavirus on the environment by comparing the situations before the crisis and after the crisis. The government announced various policies to handle true of crisis and therefore the way these policies are successful and implemented within the world is additionally the foremost component of the paper. In last, it's discussed the measures that the depository institution of India, State and Central Government could adopt to spice up the economic situations simultaneously controlling this virus.

Rational of Study

It is quite clear that impact of Corona virus on the environment has been measured. It can never be measured until the virus gets end completely. Till than the environment will definitely have certain effects positive and negative both. This will continue till improvements in environment are noticed whenever there's downward movement in severity. Hence a continual effort needs to be made to estimate the impact of the pandemic on economy. No study can estimate the impact accurately. This study is undertaken to debate the present impact of pandemic on the environment with estimation of its impact for future in line with the trend of Covid position in the country and also the present impact of the same at global level.

Hypothesis for Study

H₀₁: There is a no impact of Covid 19 on Environment.

H₀₂: There is no impact of Covid 19 on Environment.

Research Methodology

- **Source of DATA**

The study is primarily based on primary data. The primary data is collected using questionnaire from various Experts through interview schedules. Questionnaires are widely used for data collection, especially in discipline research. Questionnaire is also a pre-formulated written set of questions designed by the researcher to which participants' record their answers, and mentioned it as "an efficient data collection mechanism.

- **Sampling Technique**

While selecting the sample all general people and experts were taken into consideration so on constitute the complete population. The sample comprised of assorted category of customer's and experts, therefore the opinion are often collected in every aspect. A convenience sampling is utilized to assemble response from 100 people.

- **Sampling Design**

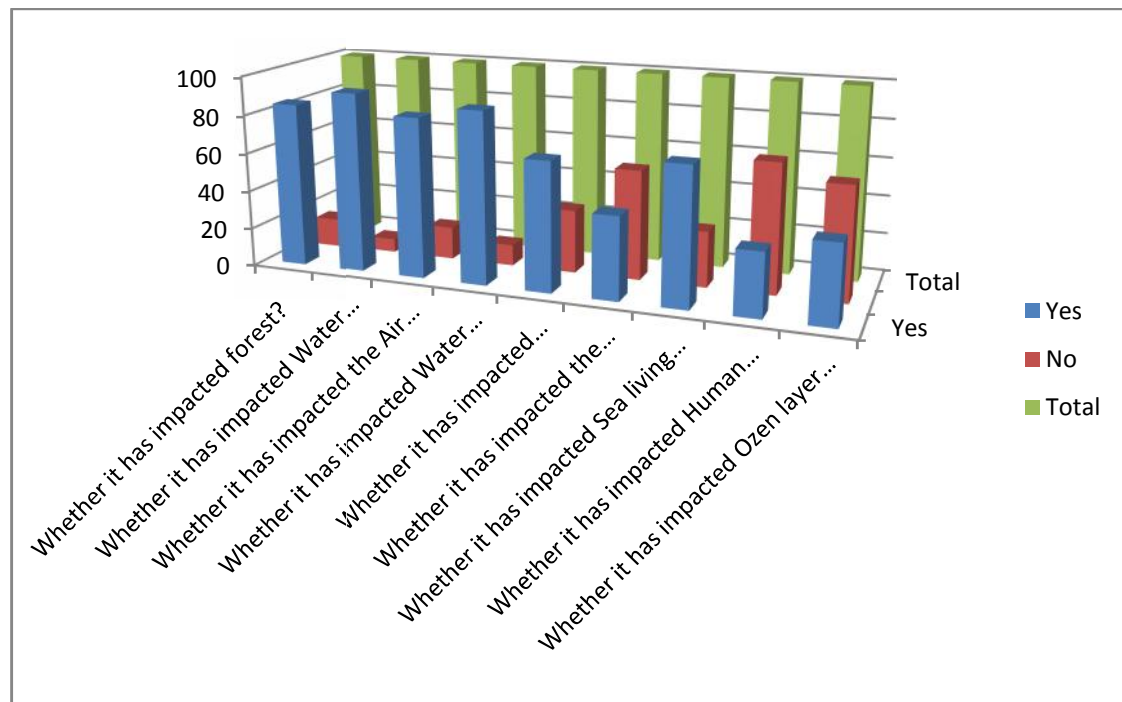
As discussed above the sampling method that was found appropriate for the present research is convenient sampling. We have chosen 100 respondents for our research.

Results and Analysis

The Covid -19 was a life changing event of everyone in the world. The impact have been analysed using various questions asked from the experts and their replies which is again consolidated to evaluate single impact.

Table 1: Experts opinion regarding impact of Covid 19 on Environment

Question	No. of Respondents		
	Yes	No	Total
Whether it has impacted forest?	85%	15%	100%
Whether it has impacted Water resources?	93%	07%	100%
Whether it has impacted the Air Quality?	83%	17%	100%
Whether it has impacted Water Reservoirs?	89%	11%	100%
Whether it has impacted Animals, Birds because of reduction of pollution?	67%	33%	100%
Whether it has impacted the environment of Rural Areas with clean and natural Environment?	43%	57%	100%
Whether it has impacted Sea living animals because of reduction of water waste?	71%	29%	100%
Whether it has impacted Human Beings living on mountains?	33%	67%	100%
Whether it has impacted Ozen layer recoovery?	41%	59%	100%



As we can see in above table that most of ELEMENTS OF environment has impacted by the Covid 19. Almost all the portions of the environment have direct or indirect impact. This needs us to immediately take some corrective actions to make recovery of the environment in the areas where it is highly impacted.

Conclusion

Restrictions to cut back human interaction have helped to avoid greater suffering and death from the COVID-19 pandemic, but have also created socioeconomic hardship. This disruption is totally unexpected in this century which has disturbed the entire world where human tracking is observed first time in the world and behaviour of the people has doing every of their work from home only. While short-term impacts are dominated by direct effects arising from reduced human action, longer-lasting impacts are likely to result from cascading effects of the economic recession on global poverty, green investment and human behaviour. These impacts offer the chance for novel insight, particularly with the careful deployment of targeted data collection, coordinated model experiments and solution-oriented randomized controlled trials, during and after the pandemic.

Recommendations

It is assumed that, all of those environmental consequences are short-term. So, it's time to form a correct strategy for long-term benefit, further as sustainable environmental management. The COVID-19 pandemic has elicited a world response and makes us united to win against the virus. Similarly, to shield this globe, the house of kith and kin, united effort of the countries should be imperative. Some of the suggestion for overcoming the environment problems are as follows:

- Sustainable industrialization:** Industrialization is crucial for economic growth; however, it is time to consider sustainability. For sustainable industrialization, it's essential to shift to less energy-intensive industries, use of cleaner fuels and technologies, and powerful energy efficient policies. Moreover, industries should be inbuilt some specific zones, keeping in mind that waste from one industry is used as raw materials of the opposite. After a specific period, industrial zones should are finish off in an exceedingly circular due to reduce emission without hampering the financial set-up. Again, industries especially readymade garments (RMG) et al. where an enormous number of individuals work, proper distance and hygienic environment should maintain to scale back the spread of any infectious disease.

- **Use of green and public transport:** to cut back emissions, it's necessary to encourage people to use transport, rather private vehicles. Besides, people should encourage to use bicycle during a short distance, and public bike sharing (PBS) system (like China) should be available for mass usage, which isn't only environment friendly but also beneficial for health.
- **Use of renewable energy:** Use of renewable energy can lower the demand of fossil fuels like coal, oil, and fossil fuel, which may play a very important role in reducing the GHGs emissions. But, to take care of the daily needs and global economic process, it's inconceivable to cut-off energy demand sort of a pandemic situation.
- **Wastewater treatment and reuse:** to regulate the challenges of pollution, both industrial and municipal wastewater should be properly treated before discharge.
- **Waste recycling and reuse:** to scale back the burden of wastes and environmental pollution, both industrial and municipal wastes should be recycled and reused. Hence, circular economy or circularity systems should implement in the production process to reduce the utilization of stuff and waste generation. Moreover, hazardous and infectious medical waste should be properly managed by following the rules. It's now clear that majority of the people (especially in developing countries) have an absence of information regarding waste segregation and disposal issues.

References

1. Bashir M. F. Bilal, B. M. and Komal B. (2020). Correlation between Environmental Pollution Indicators and COVID-19 Pandemic: A Brief Study in Californian Context. *Environmental Research*, 187:109652.
2. Chakraborty, I., and Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 728:138882.
3. Chauhan A.J. and Johnston S.L. (2003). Air pollution and infection in respiratory illness. *British medical bulletin*. 1;68(1):95-112.
4. Cruz Santa Cruz, T., López Giraldo, A., Noell, G., Casas Recasens, S., Garcia, T., Molins López- Rodó, L., and Faner, R. (2019). Multi-level immune response network in mild-moderate Chronic Obstructive Pulmonary Disease (COPD). *Respiratory Research*, 20, p. 152.
5. Between Nation and Notion of Self Reliant Aatma Nirbhar....www.businessworld.in
6. Dev, S, Mahendra (2020), "Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India", IFPRI Blog, April 8. <https://www.ifpri.org/blog/addressing-covid-19-impacts-agriculture-food-security-and-livelihoods-india>
7. Gormsen, N.J., & Koijen, R.S. (2020). Coronavirus: Impact on stock prices and growth expectations. University of Chicago, Becker Friedman Institute for Economics Working Paper, (2020-22).
8. Mahato, S., Pal, S., and Ghosh, K. G. (2020). Effect of lockdown amid COVID-19 pandemic on air quality of the megacity Delhi, India. *Science of the Total Environment*, 139086.
9. Mehta, S., Shin, H., Burnett, R., North, T., and Cohen, A. J. (2013). Ambient particulate air pollution and acute lower respiratory infections: a systematic review and implications for estimating the global burden of disease. *Air Quality, Atmosphere & Health*, 6(1), 69-83.
10. Sharma, S., Zhang, M., Gao, J., Zhang, H and Kota, S. H. (2020). Effect of restricted emissions during COVID-19 on air quality in India. *Sci. Total Environ.* 728: 138878.
11. Stone, M. (2020). Carbon emissions are falling sharply due to coronavirus. But not for long. *National Geographic*.
12. KPMG (2020). Potential Impact of COVID-19 on the Indian economy. April 2020. <https://home.kpmg/content/dam/kpmg/in/pdf/2020/04/potential-impact-of-covid-19-on-the-indian-economy.pdf>.

