COVID -19 and its environmental impacts. COVID-19 y sus impactos ambientales.

Imtiyaz Rasool Parrey*,

Department of chemistry , Government Women College Anantnag Jammu and Kashmir pin 1992210

*Corresponding author email: imtiyazchemistry@gmail.com

ABSTRACT.

This analysis aims to show the impact of COVID-19 on the environment, particularly in the countries, which are deadly affected by COVID-19, such countries include China, USA, Italy, and Spain. Our experiment suggested that there are significant contingency measures and improvements in air quality, clean beaches, rivers, and environmental noise reduction. However, on the other side, there are some negative effects of COVID -19 such as the reduction in cycling, large waste, fishing, unemployment. In order to build back better UN has given six climate-related actions to shape the recovery for the future.

Keywords: COVID-19; sports, waste management, fisheries, unenmploy.

RESUMEN

Este análisis tiene como objetivo mostrar el impacto de COVID-19 en el medio ambiente, particularmente en los países que se ven gravemente afectados por COVID-19, tales países incluyen China, Estados Unidos, Italia y España. Nuestro experimento sugirió que existen importantes medidas de contingencia y mejoras en la calidad del aire, playas limpias, ríos y reducción del ruido ambiental. Sin embargo, por otro lado, existen algunos efectos negativos del COVID -19 como la reducción del ciclismo, los grandes desperdicios, la pesca, el desempleo. Con el fin de reconstruir mejor, la ONU se han dado seis acciones relacionadas con el clima para dar forma a la recuperación para el futuro.

Palabras clave: COVID-19; deportes; manejo de desperdicios, pesca, desempleo.

RESUMEN

ENVIRONMENTAL IMPACTS OF COVID-19

Air pollution is the most concerning environmental challenge in china, which causes 1 million premature deaths each year. The coronavirus first appeared in late December in

Wuhan, China. As it rapidly spilled into neighboring regions. Chinese government locked down the city and quarantining 11 million people in Wuhan. It causes around 5,00000 deaths worldwide (WHO, 2020).

According to Lauri Myllyvirta, an analyst at the Centre for Research on Energy and Clean Air in Finland, the restrictions contributed to a 25 percent drop in China's carbon dioxide emissions over four weeks beginning in late January, compared to the same time last year (Global Carbon Project, 2020). Myllyvirta's analysis also found that industrial operations were reduced by 15 percent to 40 percent in some sectors and that coal consumption at power plants fell by 36 percent. Pollution levels have similarly decreased over Italy, which has become the center of the coronavirus pandemic outside China. On March 8, as cases spiked, Italy locked down its northern Lombardy region NASA and European Space Agency (ESA) pollution monitoring satellites have detected significant decreases in nitrogen dioxide (NO2) over China Fig 1.

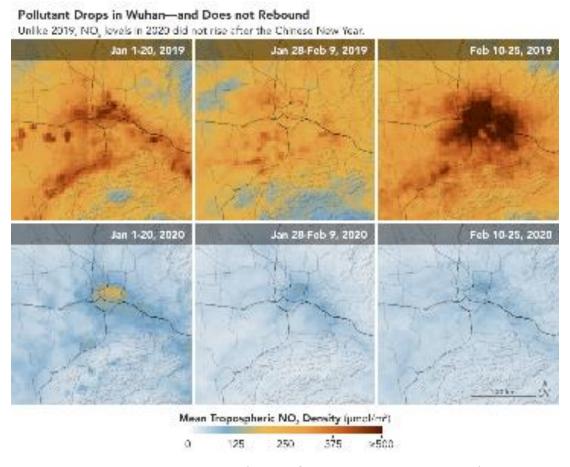


Fig 1 Evolution of NO₂ concentrations in Wuhan

There is evidence that the change is at least partly related to the economic slowdown following the outbreak of coronavirus

Pandemic closures have called attention to air quality issues around the world. Photo comparisons of cities before and during quarantine measures show <u>stark reductions in visible smoq</u>, while larger regions like North America are reporting <u>lower pollutant concentrations throughout</u>.

The <u>Global Nitrogen Dioxide Monitoring Home Page</u> visualizes OMI NO_2 data for major cities around the world for January through April 2020, compared to a 2015 to 2019 baseline. For example, these data <u>show a 30 percent drop in NO_2 over the Northeast United States</u> for March 2020 compared to baseline Fig 2.

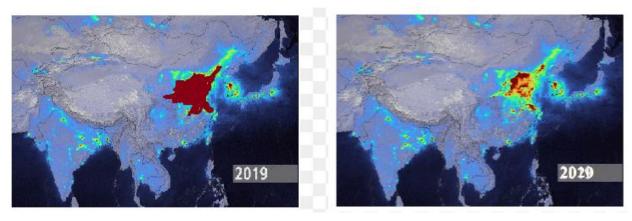


Fig 2 Comparison of nitrogen dioxide emissions over Europe between March and April 2019 and 2020.

(Lynne Peskoe-Yang) German Aerospace Center Remote Sensing Technology Institute researchers find a healthier atmosphere using the Copernicus Sentinel 5-Precursor (S5P) (CAMS 2020), a, which can detect the spectral signatures of specific gases, the ESA researchers measured global nitrogen dioxide (NO₂) levels that were 20 percent and 75 percent lower during the shutdown period than during the same period in 2019 (WHO, 2016). Locally, the impact of shutdowns on air quality varies widely and likely depends on the different progressions of the pandemic in each region (Zhang et al., 2017).

Due to the COVID-19 pandemic, the noise pollution caused by anthropogenic activities like engines, Airplanes, and melodies at high volume is the main source of noise pollution. Environmental pollution is the most discomfort for the population and the environment

(Zambrano Monserrate and Ruano, 2020). In New York City, <u>9 out of 10 adults</u> may be exposed to noise levels considered harmful by the Environmental Protection Agency In Europe, according to a <u>recent report</u> from the European Environment Agency (EEA), at least one in five people are exposed to noise levels that are harmful to health. Transportation is key to urban noise, stresses Yousef Sakieh, who researches land use at the Gorgan University of Agricultural Sciences and Natural Resources in Iran. Thus, "it is expected to have lower noise levels during the pandemic. Another reason why the noise pollution was decreased is that the imposition of quarantine measures by most governments has caused people to stay at home. With this, the use of private and public transportation has decreased significantly The generation of organic and inorganic wastes is directly proportional to environmental issues like soil erosion, water pollution, and deforestation (Mourad, 2016; Schanes et al., 2018). Medical wastes also rise the hospitals in Wuhan produce 5 times more wastes per day during the outbreak, compared normal days some developed countries, there has been an increase of garbage from pros anal equipment such as masks and gloves (Calma, 2020) Fig 3.

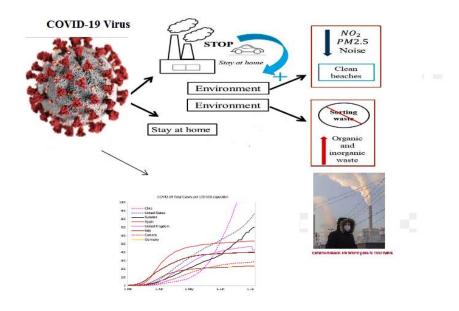


Fig 3 showing the overall effect of COVID-19 on the environment

The disturbance from the pandemic provided cover for illegal <u>deforestation</u> processes. This were detected <u>in Brazil</u>, where satellite imagery showed <u>deforestation of the Amazon rainforest</u> surging by over 50 percent compared to baseline levels (NBC News. 6 & 11 May 2020).

<u>Unemployment</u> caused by the COVID-19 pandemic facilitated the recruitment of laborers for <u>Pakistan</u>'s <u>10 Billion Tree Tsunami</u> campaign <u>to plant</u> 10 billion trees – the estimated global annual net loss of a tree.

Due to the COVID-19 pandemic plea for the fish and fish, prices have both decreased due to the Smithsonian Magazine. Retrieved 24 April 2020 and fishing convoys around the world sit mostly idle (Washington Post retrieved 25 April 2020). German scientist Rainer Froese has said the fish biomass will increase due to the sharp decline in fishing, and projected that in European waters, some fish such as herring could double their biomass (Washington Post retrieved 25 April 2020. As of April 2020), signs of aquatic recovery remain mostly unreliable.

ANALYSES AND RECOMMENDATIONS

As the world to begin the planning for post-pandemic recovery, the United Nations is calling on Governments to seize the opportunity to "build back better" by creating more sustainable, resilient and inclusive societies. <u>Six climate-related actions</u> to shape the recovery for future progress Retrieved 25 June 2020.

REFERENCES

- Calma, J., 2020. https://www.theverge.com/2020/3/26/21194647/the-covid-19-pandemic-is-generating-tons-of-medical-waste Accessed date: 5 April 2020.
- CAMS, 2020. https://atmosphere.copernicus.eu/amid-coronavirus-outbreak-copernicusmonitors-reduction-particulate-matter-pm 25-over-china, Accessed date: 5
 April
- Global carbon emissions dropped 17 percent during coronavirus lockdowns, scientists say". NBC News. Retrieved 30 May 2020.
- Global carbon emissions dropped 17 percent during coronavirus lockdowns, scientists say". NBC News. Retrieved 30 May 2020.
- Millan Lombrana, Laura (17 April 2020). <u>"With Fishing Fleets Tied Up, Marine Life Has a Chance to Recover"</u>. Bloomberg Green. Retrieved 25 April 2020.
- Mourad, M., 2016. Recycling, recovering and preventing "food waste": competing solutionsfor food systems sustainability in the United States and France. J. Clean. Prod.126, 461–477.
- Schanes, K., Dobernig, K., Gözet, B., 2018. Food waste matters-a systematic review of household food waste practices and their policy implications. J. Clean. Prod. 182, 978–991

Zambrano-Monserrate, M.A., Ruano, M.A., & Sanchez-Alcalde, L., 2020. Indirect effects of COVID-19 on the environment. Science of the Total Environment 728 (2020) 138813 Zhang, Q., Jiang, X., Tong, D., Davis, S.J., Zhao, H., Geng, G., Ni, R., 2017. Transboundary health impacts of transported global air pollution and international trade. Nature 543, 705–709.2020.

Received: 07th Jule 2020; Accepted: 21th October 2020; First distribution: 01 th January 2020.