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Perspective Article

The Benefits and Impact of COVID Lockdown on the Environment

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Abstract

Evidence-based research indicates that river basins are cleaner due to fewer people driving due to community lockdowns. Further, air quality has improved due to lessened home-to-work/school transportation and more Work-From-Home (WFH) remote options. Moreover, governments are experiencing challenges providing food to the most vulnerable communities from a food security standpoint. For example, those in global slums are particularly challenged during this time. Air, water, soil, and noise pollution have diminished since the pandemic as manufacturing production has been severely reduced in some industries. Food quality has been diminished because manufacturers are focused more on the quality of products rather than on perceived consumer quality. Solid and waste challenges abound as the use of hand sanitizers and chemicals to reduce the spread of the COVID-19 virus have created elevated levels of chemicals in waste programs threatening to refuse environmental factors and soil quality via toxic substances. The impacts of growth on the ecosystem are global because some species are in an overabundance within the food cycle, threatening the delicate balance of nature. On the other hand, algae overgrowth has lessened because of less carbon and nitrogen emissions. Also, human traffic and visitations to international parks have decreased. For instance, in Canada and other nature parks, animals on the plains now run free because of social distancing measures and park closures. From an economic perspective, as some industries have grown (masks/sanitation chemical/respirator production), others have declined (transportation/aviation). As a result, the pandemic has reduced air quality impacts of commercial aviation travel and lessened global cargo, which has reduced air and sound emissions worldwide

The Benefits and Impact of Covid-19 Lockdown on the Environment

The COVID lockdown has inspired human resourcefulness and has affected ecological sustainability. For example [1], demonstrated the COVID lockdown has had a benefit on environmental health impacts. In general, fossil fuel byproducts have declined, and the global COVID lockdown has prompted an improvement in air quality and decreased water contamination in numerous rural and urban communities around the world. An abridgment of the ecological effects of the COVID pandemic presents significant discoveries focusing on the following perspectives such as air contamination, air quality, energy, wildlife, international travel, and sustainability ensues [2]. Further, Arora [3] demonstrated that as the disease of COVID increased globally, lockdowns are required to limit its transmission. As a result, human movement has been greatly reduced and significantly impacted ecological restrictions linked to human health improvements. Social, economic, perfunctory, and urbanization toxins were unexpectedly reduced. Consequently, nature has benefited and exhibited improved air, cleaner waterways, noise contamination, and wildlife environments [4-7].

COVID-19 Lockdown Air Quality Benefits

He et al. (2020) verified that to forestall the acceleration of COVID transmission; the lockdown maximized air quality. The effects of the Air Quality Index (AQI) and the concentrations of particulate matter are reduced. As a result, contrasts models are differentiated within urban areas prior and with lockdown policies. Urban lockdowns prompted a sizeable improvement in air quality. Essentially, the AQI in the lockdown areas was reduced significantly. Likewise, air quality in urban communities without formal lockdowns also improved due to various kinds of counter-infection measures [2]. The AQI in those urban areas were reduced compared with the earlier year. The lockdown impacts are more significant in colder and more industrialized urban areas [8]. Despite these improvements, AQI is still higher than the World Health Organization (WHO) proposes, recommending further intervention [9]. To decrease exposure to Particulate Matter (PM2.5), WHO recommends parameters for health-harmful concentrations of significant air pollutants both outdoors and inside structures and dwellings, based on global incorporation of scientific evidence. WHO conventions examine annual and daily concentrations of fine particulates, nitrogen dioxide, sulfur dioxide, carbon monoxide, and ozone. Guidelines also cover indoor mold and dampness and emissions of gases and chemicals from furnishings and building materials that collect indoors. Most recently, WHO conventions for indoor air quality - household fuel combustion, set limits on emissions from cooking and heating stoves and recommendations regarding clean fuel use [2, 9]. However, existing ecological policies acquire comparative air quality improvements at a much lower economic cost, making lockdowns an impractical choice to solely address environmental issues. Indeed, [2] reviewed air contamination as one of the significant factors for health as it prompts widespread mortality annually. Its ecological effects incorporate corrosive torrents, diminished observation, however more critically, it influences human health. The cost of not managing or mismanagement of air particulates raise the of persistent obstructive aspiratory illness, cardiovascular sickness, and respiratory afflictions like asthma and chronic bronchitis. Nevertheless, as the world fights the COVID pandemic, less movement is another benefit of the lockdown, which has curtailed Air Particulate Levels (APL) [8]. The impact of decreased global APL diminishes instances of illness and mortality related to air contamination [2]. Current examinations fiscally measure the decrease in health impacts because of diminished air particulate levels under lockdown situations; this is in consideration of the individual intervals of COVID lockdown on the globe. The preventive advantages identified with decreased APL because of lockdown are assessed in contrast with economic harm in urban areas [10]. This aids an understanding of the extent of actual harm and induces an all-encompassing manifestation of the harms identified with the lockdown such as further disease transmission, poverty, joblessness, and depression. Finally, [11] identified the COVID pandemic had placed a significant part of the world into lockdown; as one unintended probable benefit to environmental sustainability. Air quality has scientifically improved around the world. The natural impact of lockdowns at a city and nation level require analysis from a global viewpoint [11]. Besides, intracity and intercity travel limitations have a larger impact in controlling air contamination. These outcomes are authoritative to many discretionary particulars, including city or country size, unrestricted factors, and assessment systems [12]. The heterogeneity investigation indicates that various urban areas show that the lockdown impacts are more exceptional in urban communities from lower pay, more industrialized, and congested nations [2]. Likewise, there are medical advantages following such improvement and the negated losses during the COVID lockdown. These discoveries underscore the significance of constant air contamination control methodologies to secure human health and diminish the related social and governmental strains amid and after the COVID pandemic.

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