ASSESSING THE CONUNDRUM OFCOVID 19 CATASTROPHE:CHALLENGES AND OPPORTUNITIES FOR INDIA

1ST AFFILIATION:

Dr. SUVASISH CHAKRABORTY

ASSISTANT PROFESSOR, DEPARTMENT OF POLITICAL SCIENCE

ADAMAS UNIVERSITY

KOLKATA, WEST BENGAL, INDIA

EMAIL ID: [suvasishchakraborty2011@gmail.com](mailto:suvasishchakraborty2011@gmail.com)

2ND AFFILIATION:

ENA BISWAS

STUDENT OF POST GRADUATION, DEPARTMENT OF POLITICAL SCIENCE

ADAMAS UNIVERSITY

KOLKATA, WEST BENGAL, INDIA

EMAIL ID: biswas.enaa@gmail.com

**ABSTRACT:**

COVID-19 grabbed humanity so inadequately that the aftermath is still persisting either way. The conduct of living due to isolation and home-quarantined circumstances for days with light exposure to the ambient environment is quintessential to understanding and relating positive and negative changes in either the social, economic, political, and environmental fronts, at both global and domestic levels. These changes witnessed a ramification throughout as lockdowns were executed to combat the deadly coronavirus, and the environment has undergone a drastic alteration which witnessed a change in environmental attributes (for instance improvement of air quality). Nevertheless, the adjacent environmental quality improvement dwells in irony. Amidst the catastrophic pandemic crisis, it is not the time to elate this improvement in quality as the convergence of predicament, dominated by COVID-19 is significantly more. According to the recent Sustainable Development Goals Report 2022, ‘The climate change, and conflicts, are creating spin-off impacts on food and nutrition, health, education, the environment, and peace and security, and affecting all the Sustainable Development Goals.’ Clearly, the total cycle of the humanitarian environment is affected. Perhaps this catastrophe's effect is more in practicality than in dimensions. (India is no exception from these impacts.) However, despite all the endeavors made by the Indian government, this pandemic brought momentous consequences on the economy and environment, hence on politics and society. Given this backdrop, this article is directed at how this pandemic impacted India and how India took measures to combat this pandemic. Following this, it also endeavors to assess India’s policy responses to overcome the pandemic losses.

**Keywords:** Covid-19, Catastrophic, Pandemic, Sustainable Developments Goals, Policy Response.

1. **INTRODUCTION**

Humanity has been amicable with a lot of cruelty for decades like wars, famines, and partitions. However, nowhere did it witness such an acute and intricate strangeness that conquered the whole world, as in the course of the Covid-19 pandemic. Traced back to history, be it the Spanish Flu of 1918, or more recent zoonotic viruses like H1N1, Ebola, avian flu, is distant from the generation to keep the whole world beneath the shutters and go into hibernation. Quarantine became an unvarying norm. Isolation and social distancing became a regular phenomenon. Faces went behind masks - a veil of uncertainty covered everybody’s life. In a world riven by wealth, class, politics, and competing technologies, SARS-CoV-2 seems to become the conqueror of all. The pervasive impact of the great pandemic has not only paralyzed the livelihood of people and other segments of society (such as society, polity, governance, economy, or culture) across the world but has also triggered a drastic change in the environment. Researchers, environmentalists, social scientists, and policy analysts have already given their views towards the academic realm about how the disastrous shock of the dreadful disease, ushered in the beginning of a new global world order with significant ramifications in its multifaceted contours – political, economic, strategic, or environmental. Looking back at the unprecedented challenge of COVID-19 pandemic which pushed the world to a new global trajectory, that phase is behind us, by all reckoning. But, the sequel of this pandemic is at a very startling state as it brought a consequential effect on the environment and economy. The impression of the pandemic on the environmental attributes was perceived that the quality of air and water were improved, as humanity was locked inside. Nevertheless, the incongruity of the situation is noticeable as the catastrophic pandemic crisis is significantly more. In the report of the new multi-agency United in Science 2021, it is stated that the pandemic did not slow the proceedings of climate change as there is no indication that the world is growing greener, as carbon dioxide emissions are hastily recuperating after a transient blip due to the monetary slowdown and are nowhere close to reduction objectives. Greenhouse concentrations in the atmosphere are persistently giving the planet warning(UNEP, 2021). Besides, the pandemic triggered political and economic apprehensions as it affected the socio-economic context at its core. Socio-economic inequalities have had an effect on the effects of COVID-19 not only domestically, but globally. Many countries have to go through significant economic contractions as there was a shrink in the global economy(The World Bank, 2020). COVID-19 has additionally had a drastic impact on social existence around the world. Likewise, the global pandemic has spawned immense international and domestic political problems which will harm geopolitics in forthcoming years. Consequently, the pandemic has ushered in a new era owing to the cross-cutting and transnational threats to humanity. For the most part, the human agony of the post-pandemic situation is still haunting and the impact is much greater.

1. **AFTERMATH OF THE PANDEMIC**

Despite the WHO’s cagey silence, we are most likely out of the phase where a permanent pall of gloom hung over the world. Yet, humanity is breathing in the consequences of the pandemic, and the query of whether the pandemic is over. From the onset of the catastrophic pandemic, the world knew that this pandemic is more than just a health crisis. As specified by the UN Secretary-General in his call for solidarity, “We must ensure that lessons are learned and that this crisis provides a watershed moment for health emergency preparedness and investment in critical 21st-century public services and the effective delivery of global public goods. We have a framework for action; the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. We must keep our promises for people and planet.”(United Nations, 2020). The significance of performing remedial measures to get back from the pandemic situation was taken into consideration. The lockdown was declared throughout the world which had a consequential sequel. The non-functioning of factories, industries, and regular transportation impacted directly the environment as the waste production subsided. Consequently, aviation emissions, which accounted for 2.4% of global CO2 emissions in 2018, according to the Environmental and strength study Institute (EESI) did drop substantially (Chakraborty & Maity,2020).Innumerable resources have blanketed how air satisfaction indices of the globe are biggest metropolitan cities improved notably while strict coronavirus lockdowns had been issued. Illustrations from NASA satellites confirmed a decline in the levels of nitrogen oxide because of reduced usage of non-renewable energy sources for the duration of the lockdown. Carbon monoxide and aerosol concentrations were dropped unduly (Gautam & Trivedi, 2020).Besides, the slowdown of economic activities for the duration of the lockdown has supported the surroundings to undergo a self-revival to a certain extent and also realized the volume of the contribution of domestic assets to river pollution. Though there was a light of hope according to the UN report 2021, the pandemic brought about a momentary reduction in carbon emissions and had a positive effect on the environment. As put forward by UN Secretary-General Antonio Guterres, “This is a critical year for climate action. This report by the United Nations and global scientific partner organizations provides a holistic assessment of the most recent climate science. The result is an alarming appraisal of just how far off course we are. We are still significantly off-schedule to meet the goals of the Paris Agreement.”(UNEP Report, 2021).The unprecedented human and economic crisis of COVID-19 has also jeopardized the progress of agendas as promised by the ‘Sustainable Development Goals’ (SDGs) by 2030 and thereby, worsened the existing inequalities. The detrimental effect of COVID-19 has widely disrupted the global efforts to secure 17 goals of SDGs including the lives of vulnerable communities ranging from children, women, migrants, and persons with disabilities to refugees thus, the pandemic has not only challenged the global health system but also our liabilities towards human dignity and equality. According to the recent Sustainable Development Goals Report 2022, ‘The climate change, and conflicts, are creating spin-off impacts on food and nutrition, health, education, the environment, and peace and security, and affecting all the Sustainable Development Goals’(United Nations, Department of Economic and Social Affairs, Statistics Division, 2022). The pandemic has wreaked havoc across the goals. The impact of the pandemic is so immense that more than four years of advancement in diminishing poverty has been at stake by shoving more than 93 million people globally into extreme poverty in 2020 (United Nations, Department of Economic and Social Affairs, Statistics Division, 2022). Due to a shake in economic stability, decades of progress in global health have been a challenge. The outbreak of this pandemic has affected the detrimental members of the society which comprises indigenous people. For instance, refugees and asylum seekers have been distinctly affected making existing political difficulties more difficult, while giving rise to political issues (World Economic Forum, 2020).

1. **IMPACT OF THE PANDEMIC ON INDIA**

According to WHO, “In India, from 3 January 2020 to 4:54pm CET, 23 December 2022, there have been 44,676,678 confirmed cases of COVID-19 with 530,690 deaths”(World Health Organization, n.d.).Yet, humanity is trying to breathe the liberation in the air. The sequel of this pandemic is more significant in developing nations like India due to the already declining growth rate, insufficient health offerings, and a growing population dwelling in excessive poverty. COVID‐19 pandemic impacted Indian economic sectors on primary, secondary, tertiary and quaternary sectors by concerning the political, economic, socio‐cultural and technology consequences. Thus, it became exceedingly challenging for India being the second-most populous country in the world with a population estimated to be 1,413,829,343 to embrace adequate and coherent mitigation measures such as contact tracing, isolation, mandating physical distance etc. considering the densest nature of the country in the world. Realizing the gravity of the then crisis and taking the blueprint forward into consideration with the feasible containment measures to counter the shock of the deadly virus, Union Minister of Health and Family Welfare, India, Dr. Harsh Vardhan asserted that “India has rather used the novel Coronavirus outbreak as an opportunity”(Correspondent, 2020).However, this pandemic came as a massive shock to the entire country. Following the devastating impact of the invisible enemy, India has been facing a multifaceted problem and uncertainty in every area of the society starting from the growing complexities in health sectors and medical governance (such as depletion of manpower in health sector), increasing joblessness, havoc downward slope of GDP, to pushing people in acute poverty and starvation especially to those who are engaged with informal sectors. The pandemic prompted tremendous financial misery, as India entered the most intense recession since the mid1990s, the year when India began its financial reforms program, attracting overseas direct investments (FDIs). The GDP increase charge, which has been on a downward trajectory for the reason that 2015-16 has even in addition contracted following the pandemic because of extended periods of countrywide lockdown. According to UNCTAD projects world economic growth will slow to 2.5% in 2022 and drop to 2.2% in 2023 and -7.8 in India (UNCTAD, 2022).Indian economy plausibly experienced the worst hit of economic recession since independence. However, the agricultural sector was the least impacted by the pandemic-related disruptions. According to the economic survey 2021-22 it was estimated to grow 3.9 per cent in 2021-22 on top of 3.6 per cent and 4.3 per cent respectively in the previous years. In contrast to this, statistics have shown the industrial sector, the manufacturing, construction sector went through a turbulent time. Additionally, ballooning numbers of job losses were evident since the lockdown began including salaried and non-salaried jobs. With impact of the economy, the pandemic witnessed social impact across the country. The severity of the disease immensely affected marginalized communities such as women, children, persons with disabilities, people living in poverty and other disadvantaged sections of the society. With an intention of tackling the mammoth pandemic, the entire nation had to be brought under lockdown and thereby, strict restrictions were imposed internally as well as externally to ensure the minimal human interactions adversely aggravated further inequalities, discriminations, and exclusions in the society by attacking it from the core. COVID-19 and its resultant lockdown created a chronic malnutrition problem in India because of the disruption in school midday meal programmes. It is also important to note that health care and education were affected immensely. The pandemic also had an impact on temporary economic migrants, especially since the economic downturn caused many companies to lay off employees which affected not only socially or economically but also psychologically.

The COVID-19 pandemic arguably necessitated the cause of rethinking and revisiting of India’s highly polarized political contours and public policies. Notwithstanding, the outbreak gave rise to an unprecedented crisis which put the political mechanism and political leadership under thorough scrutiny. This unforeseen calamity which emerged out of the speedy fallout of deadly disease has questioned the shared responsibly and equilibrium of cooperative federal management based on which the mind-boggling diversities of India’s political landscape get sustained. For instance, according to the Section 11 (2) of the Disaster Management Act (NDMA), 2005 states’ consultation needs to be envisaged while formulating a ‘National Plan’. In addition, section 39 (g) of NDMA also underscores the collaboration between state and district level authorities as the fundamental part of decision-making process. But the dominant centralizing tendencies were found evident when central government first announced lockdown and restrictions on the border before prior consultation with the states. The politicization of troubles like obligatory mask-wearing illustrates how a loss of consensus and divergent regulations can frustrate public fitness measures and result in more mistrust now no longer most effective closer to politicians however additionally law enforcement tasked with making sure compliance (Rume & Islam, 2020).Not only domestic but also international politics saw a dynamic effect due to this effect. This socio-economic and political disruption, affected the environment directly or indirectly. Report stated the levels of NO2 and PM2.5 reduced by almost 70% in Delhi, the capital of India (Thiessen, 2020).Overall, 46% and 50% reduction of PM2.5 and PM10 respectively, was reported in India during the nationwide lockdown (IndiaEnvironment Portal Knowledge for Change, 2020). With the shutdown of the industries, the industrial source of pollution was shrunken that resulted in less pollution load on water. Due to the fact Yamuna and Ganga reached a significant level of purity on aspect of pollution. Along with this, noise pollution was also reduced. According to the Central Pollution Control Board of India, noise level of residential area of Delhi was reduced 55 dB (daytime) and 45 dB (night) to 40 dB (daytime) and 30 dB (night) respectively (Jha et al.,2022). As a consequence, ecological restoration was a bright light. However, increased biomedical waste generation since the outbreak of COVID-19, medical waste generation adversely affected the environment, particularly the climate, challenging the Paris Climate Agreement. For the most part, it impacted the world in general and India in particular.

1. **ROLE OF INDIA IN COMBATING COVID-19**

The pandemic has disrupted livelihoods, economy, politics and environment in an inconceivable way. With the vision of winning against the global pandemic and mission of taking holistic measure, India countered the challenges possessed by COVID-19. On the onset of this pandemic, government of India constituted 11 Empowered Groups on 29 March, 2020 on different aspects of COVID-19 management in the country to take informed decisions on issues such as medical emergency planning, availability of hospitals, isolation and quarantine facility, disease surveillance and testing, augmenting human resource and capacity building, supply chain and logistics management, coordination with private sector, economic and welfare measures, information, communications and public awareness, technology and data management, public grievance, strategic issues related to lockdown (Ministry of Health and Family Welfare, Government of India, 2020).

Under PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM), the setting up of integrated public health laboratories in all districts and strengthening block public health units in 11 high focus states has been provisioned(Ministry of Health and FamilyWelfare, Government of India, 2021).In order to ensure availability of Ventilators across the country for management of COVID19 pandemic, the Ministry of Health and Family Welfare ordered procurement of Ventilators centrally for supplying to the States/UTs based on the demand received from the States/UTs along with along with the sanction of PSA oxygen Generation plant. Location-enabled app ‘Aarogya Setu’ was launched released in order track t Covid19 cases, and call tracing of individuals who had examined fine or were in contact with a Covid-19 positive individual. Individuals have been suggested to replace their health fame in phrases of Covid-19 to ensure they become now no longer infected. However, the discovery of Covid-19 Vaccination was a game changer for India. India, the vaccine manufacturing hub of the world, has contributed 60% to the global vaccine supply. The government partnership with the Serum Institute of India (SII), has manufactured the world’s largest vaccine by volume. In India, The Union Government started the National COVID-19 Vaccination Programme on 16 January, 2021. The COVID-19 vaccine is available free of cost for all citizens aged 18 years and above irrespective of their socioeconomic status at all Government COVID-19 Vaccination Centers (CVCs). India became the fastest country to administer 10 million doses of COVID vaccine in a day(Ministry of Health and Family Welfare, Government of India, 2021). On 22 March 2021, India has provided 60.4 million vaccine doses to seventy-six international locations by distinctive modalities inclusive of offers in aid, gifts, commercially and through WHO – GAVI`s COVAX alliance. India has provided vaccines to countries like South Asia, Africa, South America, and the Caribbean. Nevertheless, this Vaccine diplomacy of India will strengthen the relation with the neighborhood across the globe. It was India's neighborhood first initiative to strengthen the bond globally causing leverage over western countries. This also had an advantage over China, as China too offers vaccines to other countries. Due to the fact, this has helped India in reviving the economy being the global supply chain. However, despite the challenges faced by the pandemic, the country altogether managed to pulled through this even though not completely but mostly.

1. **POLICY FRAMEWORKS AND LIMITATIONS**

In this warfare, deliberative steps were to be taken to combat the pandemic. Hence, policy measures were taken. Legislative measures were taken by both the central and state governments being constitutionally empowered. India’s Epidemic Diseases Act was invoked and a recent amendment, Epidemic Diseases (Amendment) Ordinance, 2020 (“2020 Ordinance”) was made after the pandemic broke out. The key amendments aim to ensure the protection and security of healthcare service personnel nationwide, expand the powers of the central government to restrict movement of people and transport, and empower authorities to take legal action against damage to property and violence against health personnel (PRS Legislative Research, n.d.). Section 144 of the Indian Penal Code, which empowers authorities to take legal action "against those indulging in spread of disease" and prohibits gathering of people were also enforced. Along with these, the COVID-19 Economic Response Task Force was set up to fight with the economic challenges. For instance, the government of India introduced the Pradhan Mantri Garib Kalyan Yojana (PMGKY), a set of relief measures to mitigate economic distress faced by vulnerable and poor people amounting to US$ 23 billion(Ministry of Finance, Government of India, 2020). Along with of the socio-economic and political policy implementation, there were also environment policies taken by the Indian Government. CPCB, in India notified a guideline for handling, treatment, and disposal of waste during treatment, diagnosis, quarantine of COVID-19 patients. The contaminated wastes were managed and disposed with utmost care. Thus, the role of CPCB, municipalities, and non-government organizations (NGOs) becomes pertinent in the prevailing situation so that the environment could be saved. However, in spite of taking many measures to address the pandemic, several critical gaps and frailty was there. The sudden unexpected announcement of lockdown was caught due to which all economic activity was stopped including all types of public transport in a short time. On this aspect, migrant workers had been hit the hardest. Without personal savings and proper government guidance, these workers faced food insecurity and financial hardship, forcing migrants and their families to walk thousands of miles to reach their village where many died(Rashid, 2023). This response to COVID-19 diverted attention from other key health programs such as immunization, rural health and disease control programs which was a backdrop. Additionally, India's $23 billion PMGKY stimulus program has been criticized as inadequate, acctheounting for only 0.8% of India's GDP (IMF, n.d.). An analysis of incentive benefits also revealed that PMGKY did not raise additional funds. Hence, the reverberations were more intricated than it appeared.

1. **CONCLUSION**

COVID-19 certainly marked a paradigm shift in international order which has resulted in the birth of new era. The pandemic created chaos and extreme conditions for the environment and humanity around the world. Uncertainty and disruptions to social, economic and political aspects gave a broader perspective to the world leaders to think upon their decisions.There is no denying the fact that world’s topmost major powers have miserably failed to overcome the global crisis. With hindsight, tracing the chain of significant events which have catalyzed a changing nature of geo-political milieu in the wake of Coronavirus catastrophe, it can be argued that the pandemic has exposed the incompetency of global governance because no robust policy mechanism is firmly engineered under the umbrella of ‘international community’ and the quest for responses in tackling the deadly virus was mostly developed at the national and sub-national stage. Thereby, an anti-globalist approach has risen in the context of changing world politics. On the other hand, the ugly race of ‘vaccine nationalism’ among major powers such as USA, Russia, China or even India, has brought back the consideration of state sovereignty in focus as an important determinant of world politics. David P. Fidler, with his sophisticated understanding, tried to assess the present scenario of world affairs: “Countries with the resources to obtain vaccines have not subordinated their needs and capacities to the objective of global, equitable access… Globally, balance-of-power politics has returned to world affairs. Geopolitics calculations have shaped national responses to Covid-19, with the United States and China treating the pandemic as another front in their rivalry for power and influence. National access to corona virus vaccines has become a priority in power politics, especially as a means to recover from the economic damage at home, in export markets, and within regions of strategic importance in the balance of power”(Fidler, 2020).

Despite of all the backdrops, the Indian government responded very aggressively to the COVID-19 crisis. However, pandemic has become less threatening in the global public consciousness, but its impacts are still being deeply felt. There was positive aspect during the COVID-19 crisis. The study period and the facts and figures testify to this rigorous objectivity and expectations. Attempts to establish a causal relationship between three key attributes, namely air, water and solid waste, and observed changes in the environment suggest at first glance the expected positive impacts of limited activity across populations and sectors. It can be said very convincingly that the restriction of activity had a direct positive effect to a large extent on almost all key characteristics of the environment, with the exception of biomedical waste parameters. Key government policies and non-governmental organizations are still working to manage this pandemic situation and provide maximum comfort at all levels. For instance, although the Coronavirus catastrophe mercilessly exposed the shortcomings, government policies India’s Vaccine diplomacy brought a shift in the India’s foreign policy multidimensional priorities with regard to the new development at multilateral, regional or bilateral stages. However, this phase is behind the humanity even though the consequences could be felt in the air. It is essential to sustain this momentum and continue to contribute in every way possible.

**REFERENCES:**

[1] UNEP. (September 16, 2021). “COVID-19 caused only a temporary reduction in carbon emissions – UN report.” *UNEP.*Retrieved from [**http://www.unep.org/news-and-stories/press-release/covid-19-caused-only-temporary-reduction-carbon-emissions-un-report**](http://www.unep.org/news-and-stories/press-release/covid-19-caused-only-temporary-reduction-carbon-emissions-un-report)(Accessed on: 2nd January, 2023)

[2] The World Bank. (June 8, 2020). “The Global Economic Outlook during the COVID-19 pandemic: A changed world”. *The World Bank.* Retrieved from: [**https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world**](https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world)(Accessed on 10th November, 2020)

[3] United Nations. (March 19, 2020). “This is, above all, a human crisis that calls for Solidarity.”*United Nations*. Retrieved from: [**https://www.un.org/en/un-coronavirus-communications-team/above-all-human-crisis-calls-solidarity**](https://www.un.org/en/un-coronavirus-communications-team/above-all-human-crisis-calls-solidarity)(Accessed on: 25th December, 2020)

[4] Chakraborty, I., & Maity, P. (2020). “Covid-19 outbreak: Migration, effects on society, Global Environment and Prevention”. *Science of The Total Environment*, *728*, 138882. Retrieved from: [**https://doi.org/10.1016/j.scitotenv.2020.138882**](https://doi.org/10.1016/j.scitotenv.2020.138882) (Accessed on 2nd February, 2023)

[5] Gautam, S., & Trivedi, U. (April 4, 2020). “Global implications of bio-aerosol in pandemic”. *Environment, Development and Sustainability*, *22*(5), 3861–3865. Retrieved from: [**https://doi.org/10.1007%2Fs10668-020-00704-2**](https://doi.org/10.1007%2Fs10668-020-00704-2) (Accessed on 5 June, 2023)

[6] UNEP.(September 16, 2021). “Covid-19 caused only a temporary reduction in carbon emissions – UN report”.*UNEP.*Retrieved from: [**https://www.unep.org/news-and-stories/press-release/covid-19-caused-only-temporary-reduction-carbon-emissions-un-report**](https://www.unep.org/news-and-stories/press-release/covid-19-caused-only-temporary-reduction-carbon-emissions-un-report) (Accessed on: 5th July, 2023)

[7] United Nations. (July 7, 2022). *–* “The Sustainable Development Goals Report 2022. *United Nations.*Retrieved from: [**https://unstats.un.org/sdgs/report/2022/**](https://unstats.un.org/sdgs/report/2022/)(Accessed on 25th December, 2022)

[8] United Nations. (July 7, 2022). *–* “The Sustainable Development Goals Report 2022. *United Nations.* Retrieved from: [**https://unstats.un.org/sdgs/report/2022/**](https://unstats.un.org/sdgs/report/2022/)(Accessed on 25th December, 2022)

[9] Forum, W. E. (August 13, 2020). “Migrants and refugees are being forgotten in the COVID-19 response. This has to change”. *The European Sting* - *Critical News & Insights on European Politics, Economy, Foreign Affairs, Business & Technology - europeansting.com.* Retrieved from: [**https://europeansting.com/2020/08/13/migrants-and-refugees-are-being-forgotten-in-the-covid-19-response-this-has-to-change/**](https://europeansting.com/2020/08/13/migrants-and-refugees-are-being-forgotten-in-the-covid-19-response-this-has-to-change/)(Accessed on 2nd February, 2021)

[10] World Health Organization. (n.d.). “India: Who coronavirus disease (covid-19) dashboard with vaccination data”. *World Health Organization*. Retrieved from: [**https://covid19.who.int/region/searo/country/in**](https://covid19.who.int/region/searo/country/in)(Accessed on 10th April, 2023)

[11] Correspondent, S. (2020, July 7). “We can’t let coronavirus pandemic stop us, says harsh Vardhan”. *The Hindu*. Retrieved from: [**https://www.thehindu.com/news/national/we-cant-let-coronavirus-pandemic-stop-us-says-harsh-vardhan/article32014039.ece**](https://www.thehindu.com/news/national/we-cant-let-coronavirus-pandemic-stop-us-says-harsh-vardhan/article32014039.ece)(Accessed on 18th July, 2022)

[12] UNCTAD. (2022). Trade and Development Report 2022*. UNCTAD*. Retrieved from: [**https://unctad.org/tdr2022**](https://unctad.org/tdr2022) (Accseed on 3rd May, 2023)

[13] Rume, T., & Islam, S. M. D.-U. (2020). “Environmental effects of COVID-19 pandemic and potential strategies of Sustainability”. *Heliyon*, *6*(9). Retrieved from : [**https://doi.org/10.1016/j.heliyon.2020.e04965**](https://doi.org/10.1016/j.heliyon.2020.e04965)(Accessed on 15th August, 2022)

[14] Thiessen, T. (April 11, 2020). “How clean air cities could outlast Covid-19 Lockdowns”. *Forbes.* Retrieved from: [**https://www.forbes.com/sites/tamarathiessen/2020/04/10/how-clean-air-cities-could-outlast-covid-19-lockdowns/?sh=9a42c0e6bb5b**](https://www.forbes.com/sites/tamarathiessen/2020/04/10/how-clean-air-cities-could-outlast-covid-19-lockdowns/?sh=9a42c0e6bb5b) (Accessed on 7th July, 2023)

[15] India Environment Portal Knowledge for Change. (Aril 21, 2020). “ImpactOf Lockdown (25th March To 15th April) On Air Quality”. *India Environment Portal* | News, reports, documents, blogs, data, analysis on environment & development | India, South Asia. Retrieved from: [**http://www.indiaenvironmentportal.org.in/content/467415/impact-oflockdown-25th-march-to-15th/**](http://www.indiaenvironmentportal.org.in/content/467415/impact-oflockdown-25th-march-to-15th/)(Accessed on 5th August, 2022)

[16] Jha, D. K., Yashvardhini, N., Samiksha, & Kumar, A. (2022). “Rejuvenating impact of covid-19 lockdown on major environmental parameters: An Indian perspective”. *Spatial Information Research*, *31*(3), 301–313. Retrieved from:[**10.1007/s41324-022-00499-6**](https://doi.org/10.1007%2Fs41324-022-00499-6) (Accessed on 5th June, 2022)

[17] Ministry of Health and Family Welfare, Government of India. (2020). “Ministry of Health & Family Welfare 2020 Achievements”. *Press Information Bureau*. Retrieved from: [**https://www.pib.gov.in/PressReleasePage.aspx?PRID=1684546**](https://www.pib.gov.in/PressReleasePage.aspx?PRID=1684546)(Accessed on: 14th August 2021)

[18] Ministry of Health and Family Welfare, Government of India (2021). “Steps taken to ensure access to testing, treatment and vaccines”. *Press Information Bureau*. Retrieved from: [**https://pib.gov.in/PressReleasePage.aspx?PRID=1783810**](https://pib.gov.in/PressReleasePage.aspx?PRID=1783810) (Accessed on 25th August 2023)

[19] Ministry of Health and Family Welfare, Government of India (2021). “Steps taken to ensure access to testing, treatment and vaccines”. *Press Information Bureau*. Retrieved from: [**https://pib.gov.in/PressReleasePage.aspx?PRID=1783810**](https://pib.gov.in/PressReleasePage.aspx?PRID=1783810) (Accessed on 25th August 2023)

[20] PRS Legislative Research. (n.d.). “The epidemic diseases (amendment) ordinance, 2020”. *PRS Legislative Research.* Retrieved from: [**https://prsindia.org/billtrack/the-epidemic-diseases-amendment-ordinance-2020**](https://prsindia.org/billtrack/the-epidemic-diseases-amendment-ordinance-2020) (Accessed on 10th July 2023)

[21] Ministry of Finance, Government of India (2020). “Finance minister announces rs 1.70 Lakh Crore relief package under Pradhan Mantri Garib Kalyan Yojana for the poor to help them fight the battle against Corona virus”. *Press Information Bureau.* Retrieved from : [**https://pib.gov.in/Pressreleaseshare.aspx?PRID=1608345#:~:text=The%20Union%20Finance%20%26%20Corporate%20Affairs,the%20battle%20against%20Corona%20Virus**](https://pib.gov.in/Pressreleaseshare.aspx?PRID=1608345#:~:text=The%20Union%20Finance%20%26%20Corporate%20Affairs,the%20battle%20against%20Corona%20Virus)**.** (Accessed on 25th October 2022)

[22] Rashid, O. (March 23, 2023). “Migrant crisis: Revisiting the undignified journey to home during lockdown”. *Outlook.*Retrieved from: [**https://www.outlookindia.com/national/migrant-crisis-revisiting-the-undignified-journey-to-home-during-lockdown-news-272354**](https://www.outlookindia.com/national/migrant-crisis-revisiting-the-undignified-journey-to-home-during-lockdown-news-272354) (Accessed on August 13, 2023)

[23 IMF (n.d). “Policy RESPONSES TO COVID”. *IMF.* Retrieved from: [**https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19**](https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19)(Accessed on August 13, 2023

[24] Fidler. D. P. (August 14, 2020), “Vaccine nationalism’s politics”. *Science, Vol. 369* (6505): 749. Retrieved from: [**https://science.sciencemag.org/content/369/6505/749**](https://science.sciencemag.org/content/369/6505/749)**, (**Accessed on 1st September, 2022)