# COVID-19 and its impact on environment and entertainment industry with special reference to India

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## **Abstract**

The outbreak of the Novel Corona Virus infection, Covid -19 has stepped its foot in the month of December 2019 from the sea food market of Wuhan city of China. The first case of covid-19 pandemic in India was reported on 30th January 2020, originating from china. the virus till 2<sup>nd</sup> of June, 2020 has already infected more than 64,70,000 people in the world and killed almost 3,80,000 people. Though the virus has infected many sectors but this paper attempts to find out the positive and negative impacts of Covid-19 on environment and entertainment sector. Decrease in greenhouse gas emission, reduction in noise, water, air pollution are some of the positive impacts as against the negative impacts on environment like increased man animal conflicts and increase in medical and household wastes. Similarly on the entertainment industry close down of cinema hall, impacts on the livelihoods of the people directly and indirectly associated with entertainment sector, opportunities for streaming platforms, increase in internet based activities etc. are some of the impacts observed.

## 1. Introduction:

The outbreak of the Novel Corona Virus infection, Covid -19 has stepped its foot in the month of December 2019 from the sea food market of Wuhan city of China (Chakraborty & Maity, 2020). As the name itself says that this is something new in this modern era. This virus at first was thought basically to be a combination of SARS and MERS. The Severe Acute Respiratory Syndrome (SARS) which swept around the world in 2002 to 2003, infecting almost 8000 people and killed 774 people; and MERS which is Middle East Respiratory Syndrome that emerged in 2012, infecting 2519 people and made 866 people its

victim according to WHO (National Institute of Allergy and Infectious Diseases (NIH), 2020). Looking at the similar symptoms, the different executive bodies of the scientists did not bother that much believing Covid-19 virus to be the member of SARS family. But as soon as its gripping became stronger and stronger, it drew the attention of the whole world including the WHO towards it. Until the medical society could understand anything this virus got spread across the entire globe. The first case of covid-19 pandemic in India was reported on 30th January 2020, originating from china (From first case on Jan 30, 2020). The massive impact of the virus can be understood from the fact that till 2<sup>nd</sup> of June, 2020 more than 64,70,000 people got infected from the disease in the world and almost 3,80,000 people died (World Health Organization, 2020). Till date there are no clinically approved antiviral drugs or vaccines to cure COVID-19. Many reports are coming on social as well as other electronic and print media claiming the antivirus vaccine invented by many countries, but it is not yet confirmed by any authentic source. Hence how to control the spread of the virus is a big question for many countries. India is currently in 5<sup>th</sup> rank in terms of Covid-19 cases in the world. Total number of people infected are 2,07,615 and out of which 5815 people died as on 2<sup>nd</sup> June, 2020 (My Gov, 2020). As per the same portal almost 1400 people become infected in Assam till 2<sup>nd</sup> June. The situation could have been worst, but Govt of India's timely decision to lockdown the country and creating awareness among people to maintain social distancing help the country to control the spread of Covid-19.

The impact of Covid-19 can be seen in different areas like global health, global economy, on global trade & industry, global environment etc. The various sectors in India like apparel and textile, automobiles, aviation, tourism, entertainment, shipping, non-food retail industries etc. got adversely affected (Rastogi, 2020). However, this paper is mainly focusing on impact of Covid-19 on environment and entertainment sector. Mostly the impacts are indirect impacts on environment and entertainment sector.

## 2. Literature Review:

Chakraborty and Maity (2020) are mainly emphasizing on impact of corona virus on global health, global economy and global environment. They are also pointing out restricting mass gathering, medicine, forestation, global ban on wildlife trade and controlling population growth as the major strategy for controlling and preventing Covid-19. Due to the lock down decrease in the emissions of atmospheric pollutants the global environment might get affected (Lal et al. 2020). Lal et al. (2020) in their paper mainly use satellite imagery,

climatic datasets (temperature, and absolute humidity), and COVID-19 cases available in the public domain to prove their hypothesis. Due to lock down substantial reduction in the level of nitrogen dioxide (NO<sub>2</sub>: 0.00002 mol m<sup>-2</sup>), a low reduction in CO (b0.03 mol m<sup>-2</sup>), and a low-to- moderate reduction in Aerosol Optical Depth (AOD: ~0.1–0.2) in the major hotspots of COVID-19 outbreak during February-March 2020 was observed according to their paper. In their paper they also predicted increasing coverage of high COVID-19 hazard at absolute humidity levels ranging from 4 to 9 g m<sup>-3</sup> across a large part of the globe during April-July 2020 due to a high prospective meteorological suitability for COVID-19 spread. Zambrano-Monserrate, Ruano, & Sanchez-Alcalde (2020) in their paper mainly emphasizes on the impact of Covid-19 on the global environment. They highlighted many positive and negative impacts of Covid-19 on global environment. In their paper they are also accepting the fact that as global economic activities are expected to return in the coming months in most countries, so decreasing GHG concentrations during a short period is not a sustainable way to clean up the environment. Paital, Das & Parida (2020) in their paper emphasizes on the outbreak of Covid-19 and other pandemics like SARS, MERS etc. in their research work they also highlighted the history and mode of Covid-19 outbreak. The paper is also mentioning the role of specific drugs on Covid-19 management like chloroquine, hydroxychloroquine, azithromycin, tocilizumab, lopinavir, ritonavir, tocilizumab and corticosteroids. India has followed an early and a very strict social distancing by lockdown and has issued advisory to clean hands regularly by soap and/or by alcohol based sterilizers and in this way India better manage both spread of infection and death (Paital, Das & Parida, 2020).

# 3. Objectives of the study:

Objectives of the study are:

- 1. To find out the positive and negative impacts of Covid-19 on environment.
- 2. To find out the positive and negative impacts of Covid-19 on entertainment sector.

## 4. Methodology:

This study is centred on exploring the impact of Covid-19 on environment and entertainment in Indian perspective. This study, therefore, is exploratory in nature. The required data for this study has been collected from secondary sources which include journal articles, books, websites etc. Extra care has been taken so as to ensure that the aforementioned collected data can lead towards fulfilment of the study objectives as mentioned above. The above required data has been gathered from relevant sources as

explained earlier in the above sections from the year 2010 onwards. Since Covid-19 is an ongoing issue hence most of the journals and news articles used as secondary source are from the year 2020 only. This study is purely qualitative in nature.

## 5. Discussions:

## 5.1 Impact of Covid-19 on environment:

From the inception of civilization, human beings have always been harming the nature for its own benefits. Due to the uncontrollable increase of population and to fulfil their needs industrialization and urbanization became inevitable. The entire human race entered into an undefined completion. The crave for more power among the countries lead to the activities which are detrimental on the global environment. These activities leads to the environmental concerns like air pollution, water pollution, climate change, ozone layer depletion, global warming, depletion of ground water level, change of biodiversity & ecosystem, arsenic contamination and many more (Coutts, Beringer & Tapper, 2010; Bremer, Schneider & Glavovic, 2019; Chakraborty & Maity, 2020). The increasing concentration of greenhouse gases like CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O etc. leads to the ozone layer depletion and global warming.

But after lock down notable changes can be observed on environment. Many scientific bodies and researchers are keeping their eyes on the positive and negative impacts of Covid-19 on environment.

# **5.1.1 Positive impacts on Environment:**

Decrease in greenhouse gas emission: Due to reduction of the number of private cars, public transport etc. on the road it releases lesser amount of harmful gases like Oxides of Nitrogen, particulate matter etc. in the environment which results in reduction of air pollution in our environment. Experts predicted that greenhouse gas (GHG) emissions could drop to proportions never before seen since World War II (Earth is healing as world carbon, 2020). The article in The Economic Times mentioned that during the phase carbon pollution decreases by 17% in the World and by 26% in India during peak time of pandemic when the entire world was shutdown.

**Reduction in noise pollution:** Due to lockdown many industries were closed down and also the cars on the streets disappeared during the peak time. Apart from vehicles related to essential services other vehicles were not allowed on the streets in the month of April. This leads to the reduction of noise level in our environment. Specially in the cities due to no honking of horns the beautiful chirping of birds can be heard distinctly. This helps in creating a peaceful environment.

Reduction in water and air pollution: Mainly due to the close down of many factories in the initial days of pandemic the releasing of sewage, chemicals and other waste materials to the water body as well as emission of polluted gases to the air also decreased. With the decrease in air and water pollution the skies become clearer in many metropolitan cities. Even social and print media were flooded with photographs of blue skies and clearer water bodies. Images of peaks of lower Himlayas visible from rooftops in Jalandhar became viral on the internet. Many cities in India recorded over 60 per cent drop in air pollution levels (Dey, 2020). Dey (2020) also mentioned in her article that long term exposure to particulate matter 2.5 (PM 2.5) leads to higher cases of Covid-19. As per the study conducted by the Indian Institute of Technology (IIT) Delhi, the country has witnessed 43%, 31%, 10%, and 18% decrease in PM 2.5, PM 10, CO, and NO2 levels during the lockdown period compared to previous years. Among all pollutants, PM 2.5 had a maximum reduction in most regions.

Cleaner sea beaches: Beaches are natural capital assets found in coastal areas (Zambrano-Monserrate, Silva-Zambrano & Ruano, 2018). According to the authors the beaches provides land, sand, recreation and tourism services for the survival of coastal communities. But people are using beaches irresponsibly and causing pollution problems (Zambrano-Monserrate et al., 2020). Due to social distancing rule imposed by Govt. notable changes in the sea beaches can be seen. Images of many clean beaches along with Dolphins became viral on social media. Beaches like Acapulco (Mexico), Barcelona (Spain), or Salinas (Ecuador) look cleaner and crystal clear (Zambrano-Monserrate et al., 2020).

Changing beauty of Earth: It seems that the beauty of the earth is increasing with the clear sky, more greenery and many beautiful animals and birds making its presence felt through its appearance in the human habitat areas. The dance of the peacock on the khareghat parsi colony area of Mumbai (Peacocks on the Streets, 2020) and the appearances of dolphins and swans in to the canals and waterways of Italy was proving the changes took place in the global environment due to lockdown (Kundu, 2020).

#### **5.1.2** Negative impacts on Environment:

**Increased in household and medical waste:** Due to lockdown mainly in city areas people are basically using the online services for food as well as other household things. As a result there household waste materials have increased. Moreover medical waste materials have also increased due to heavy use of hand gloves, PPE kits, masks etc. Finding out PPE

kits in garbage have been making headlines on news channels during the peak days of corona (Chauhans & Lavania, 2020).

Man animal conflicts increases in some places: Animals were coming out to the human habitat areas during lockdown in search of food and mostly due to lack of people outside the home. Herd of elephants destroying agriculture fields, face off with the leopards were some of the news come out during lockdown period (Banerjee, 2020). In Madhya Pradesh 13 people were killed in a period of three weeks by wild animals (Lockdown in Madhya Pradesh, 2020). All total 4 Leopards were killed in Jorhat, Golaghat district of Assam during the lockdown period (Hasnat, 2020).

## 5.2 Impact of Covid-19 on entertainment industry:

The media and entertainment (M&E) industry in India was estimated around INR 1631 billion in the financial year 2019 (KPMG, 2020). According to report the compound annual growth rate was 11.5% which was greater than the then GDP of 7.2% of India. However Covid-19 has adversely affected the M&E sector. CRISIL in a study estimates that the Indian M&E industry's revenue might reduce by 16% or Rs 25,000 crore to Rs 1.3 lakh crore in 2020 (Mahajan, Singh & Deo, 2020). The losses in the events and experiential industry were already more than 3000 crore projected in a survey of 100 units in the sector. Mumbai the hub of entertainment industry become a hotspot of corona virus with more than 44,000 corona cases. In Maharastra total number of cases reaches more than 74,000 (Coronavirus (Covid 19) India Live updates, 2020). "According to a Financial Express report, the film industry faced a decline of 29.1% to Rs 1062.4 crore in the first quarter of 2020, which stood at Rs 1499.4 crore for the same period last year" (Covid-19 impact explained, 2020).

## **5.2.1 Positive and Negative impacts on Entertainment Industry:**

Corona virus impacts 60 millions livelihood: The pandemic has impact livelihoods of 10 million people directly associated with the industry and another 50 million people indirectly associated through allied sectors like food and beverages, hospitality, tourism, advertising and marketing industry (Coronavirus impact: Events, entertainment industry, 2020). Due to the cancellations of all major events, conferences, both public and private, national/international meetings, incentives, conferencing, exhibitions (MICE) events the livelihood of these people are in risk as per the article in The Economic Times. Daily wage workers of the entertainment industry like spot boys were adversely hit.

Close down of Cinema Halls: Due to close down of cinema halls release of many big budget films were postponed. Rohit Shetty's big budget film Sooryavanshi's release was postponed. Tiger Shroff starring movie Baaghi 3 released on 6<sup>th</sup> March got hit in the 2<sup>nd</sup> week

due to sudden announcement of close down of many educational institutes, offices from 16 March, 2020 (Coronavirus impact: Events, entertainment industry, 2020). In the post lockdown period footfall in the cinema halls is also going to decrease. Though multiplex like Inox, Orbit etc. are planning out so many strategies to maintain social distance but still pulling audience to the movie theatre halls is going to be a big challenge. Since there will be congestion of release of many big budget films on Fridays, many small budget films are also going to suffer to get a release date.

Opportunities for OTT Platforms: It is observed that many movies supposed to be released on cinema halls are released on streaming platforms. Chris Hemsworth starring Hollywood movie Extraction and Irfan Khan starring movie Angrezi Medium was pulled out of theatre and released on OTT platform like Netflix, Disney+Hotstar, Amazon Prime etc.. During the lock down period steaming platforms become one of the major sources of entertainment with many popular movies and web series streaming live. In near future also streaming platforms will become a primary source of revenue for film industry (Mahajan et al, 2020).

**Increase in television viewership:** As people are mostly at home during the lockdown period, hence, viewership of television increased by 60% according to A. C. Nielson (Coronavirus impact: Events, entertainment industry, 2020). Doordarshan has also broadcasted popular shows like Ramayan, Mahabhart, Buniyaad Byomkesh Bakshi etc. (Goyal, 2020). As per the article DD became the most viewed channel in the initial few weeks of pandemic with 650% increase in viewership.

Close down of live concerts: Due to the close down of live concerts for an indefinite period the future of the musicians, singers are also in stake. Mumbai being the hub of musicians and singers now many of them are migrating from Mumbai to their own states. It can be observed that now the popular singers, musicians are busy in Instagram Live, Facebook Live etc. to give little bit of entertainment to people to overcome their miseries (Mahajan et al., 2020). Many of them are busy in providing online tutorial classes to survive and earn their livelihoods.

Increase in creation and home productions: It's true that even corona virus could not stop the spirit of the creative people. Song writers, composers, singers are coming up with their creative works during the lock down period. As the nature is changing and becoming more beautiful, it gives the creative people new source of creations. It can be observed that these creative peoples are becoming more active on social media, coming up with new hopes and creations, releasing their works on YouTube, Facebook etc. platforms.

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## 6. Conclusion:

Covid-19 is proving to be one of the most dangerous pandemic situations that impact the entire human race of the world. People would always like to forget the same as a nightmare. But until and unless an effective vaccine is developed, following the social distance and cleanliness measures is going to be the mantras for people. May be migration to the urban areas will decrease in the post Covid-19 period. The mindset that people related to entertainment industry are migrating to Mumbai for a better future will also change. The internet is going to be the main medium for sharing the creative works in future. Hence people from any part of the globe could create quality works and yet can reach to their targeted audience keeping the social distance. One of the positive things among all the negative things that the human race can take from the situation is the positive impacts of lockdown on the nature. It can be expected people will become more aware of the environmental issues in the post lockdown period. May be the big leaders of the world could find some ideas out of the situation to control the pollution level in future to make the world a better place to live.

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