



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



---

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume:** 10    **Issue:** II    **Month of publication:** February 2022

**DOI:** <https://doi.org/10.22214/ijraset.2022.40324>

[www.ijraset.com](http://www.ijraset.com)

Call:  08813907089

E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)

# Endoscopic Socio: Economic Views on Pandemics

Ms. Reeva Raag<sup>1</sup>, Mr. Prerak Bansal<sup>2</sup>, Col Prof Dr J Satpathy<sup>3</sup>

<sup>1, 2, 3</sup>XIM University, Bhubaneswar, Odisha, India

**Abstract:** Like all the other years, 2020 started with tonnes of people all over the world roaring twenties on the countdown in their respective time zones and partying all night long whilst tuning on their favourite songs. Welcoming the year 2020 with all the grand merriments all around and with a sense of inner gratification as per our age-old heritage was our topmost priority. But, little did we know that, the year had brought along with it, such catastrophic elements that, in the future run, is going to totally change each and every aspect of our life and will turn our lifestyle upside down. This paper is an endoscopic view on Pandemics: yesterday, today and tomorrow.

**Keywords:** Endoscopic View, Pandemics and Management

## I. INTRODUCTION

From a death-dealing pandemic to a global movement for racial justice, the year 2020 certainly experienced its fair share of world-shifting events. It started with awakening alarms about the enormity of climatic changes – The Australian Bushfires, tracing its origin back to 2019 itself. The situation of the bushfires intensified its grip later that year and in most of the regions out of control fire sprung up which continued till mid-January, 2020, after which a wave of heavy rainfall finally brought relief in some areas hit by bushfires but it couldn't, however suffice the overall demand of water supplies to extinguish the fire completely. It was followed by February during which drought and high winds escalated the crisis all over again in its first week itself. Situations were brought under control once in mid-February, a very heavy rainfall took over, which allowed the firefighters to contain all of the fires spread over large areas of New South Wales (NSW) , but a portion of Victoria was left uncatered still! The bushfires were finally extinguished and eradicated from the Australian land on March 4<sup>th</sup>,2020 , after destroying approximately 46 million acres – roughly the same area as the entire country of Syria!

But, is it a natural calamity just marked the commencement of the severe atrocities that were about to come our way? On January 9,2020, the World Health Organisation (WHO) officially announced that a deadly coronavirus had emerged in Wuhan, China, and that it was strengthening its roots all over that region in an extremely rapid pace. Thereafter, it was very soon declared as an international public health emergency by the World Health Organization (WHO) as the number of cases surged above 7,800 around the globe. The official announcement of this pandemic in 2020, marked the beginning of a new era which demarcated the timeline into two distinct time frames namely the “pre-covid” and the “post covid” era. The severity of the chain of events that took place during this phase of pandemic changed everything. It was a year when the whole world started to fall apart, time seemed to collapse in on itself; when days were sometimes hard to tell apart; when weeks seemed to merge; when timelines seemed constantly to shift. All the domains witnessed an unforeseen downfall. The economy witnessed its largest downfall in a centennial, the employment rates declined , the stock markets crashed, the small and medium enterprises suffered.

## II. PEEP INSIDE

We all thought in the beginning this is a small-time casualty and that life would return to normal in a matter of weeks and then we'll get back to our old methods of living. But, little did we know that what we've encountered with, this time, is no normal virus! Corona has not come to leave, rather it is here to stay! Days passed, months passed and what we thought to be a few days casualty turned out to be the biggest stumbling block of all times. We went through several harsh phases and abiding by Charles Darwin's theory – “Survival of the fittest” , we adapted in response to our surrounding by making healthcare, our topmost priority and started accepting these changes and their consequences as the predominant part of our lives.

Meanwhile, we started adapting to our new lifestyle and it didn't take us long enough to accept this as our “New Normal” . Our home became our new workplace and school. Living rooms were turned into offices and the bedrooms into classrooms and the distance travelled per day to reach our workplaces or educational institutions shrunk from several kilometres to some metres and many didn't even bother to traverse that distance. Our workspace shifted from cubicles and classrooms to electronic devices which could fit in our palms or our lap. The dependency of people on technology and electronic devices took a major boost during this period. Laptops, tablets and mobile phones became an integral part of our lives during the pandemic phase.

To neutralise the covid situation, a new trend of “Work from Home” became an essential part of the new normal. It brought along with it a new casualness which never existed before, the most tedious part of the day- getting properly dressed was compromised. Dressing from the waist up, or not getting dressed at all for work or school each day became the new normal. And in a time of such stringent protocols, many of us relaxed our self-imposed restraints. Weekdays night drinking was no longer such a taboo. Chocolates, noodles, nutella, chips along with other prepacked processed foods flew off the supermarket shelves and other daily entities shops almost as quickly as the other essentials. Guilty pleasures no longer came with so much guilt. Being health cautious was no longer such big-a-deal as we were on an unplanned endless vacation. We sought comfort where we could get it, and often we weren't allowed to travel far to find it. Spending quality time with our families and making use of the free times to explore new talents we never knew we had with us added up to the most productive part of the days during those times.

Among the various changes that was brought to our lifestyles, the most heart wrenching were the in-person meetups. During those iniquitous times when we strongly needed moral support and physical presence of our near and dear ones, “Social distancing” was brought into action. The handshake was banished, and so, too, were hugs, at the very moment when we needed them most. “Home quarantine” was made mandatory and as a result all of us were packed in our houses for months which seemed like an eternity. In those times of enforced estrangement, heavy with so much sadness and bereavement, possibly all of us suffered a form of affection deficit disorder as we longed for human interaction and socialisation.

Though social distancing was the new normal, frustratingly difficult at first, gradually people started adopting to it and with the passage of time, it became an integral part of our lifestyle. It affected our lives to such an extent that the “so-called” paradox of social distancing started endangering a new intimacy. Spending more and more time with their respective families gave people a new found sense of privatisation which henceforth made them more outgoing. Some people made efforts to step out of their comfort zones and try out something totally new while the others worked on their long lost talents. Reconnecting with people from years or maybe decades back, whom we left behind in this competitive race of life gave us an escape from our real life situations and tragedies and help us hark back to the old times when life used to be simple. It gave us a reality check as to how much our life has changed over time. However, the only difference in these meetups were that the medium of reconnecting were via online modes rather than physical modes of meetups in cafes, restaurants, clubs, malls or movie theatres. Online reunions became a form of virtual refuge. In seeking out long lost friends from the past, we briefly escaped the present. The situations were so monotonous that we sought to live in nostalgia rather than face the vast reality. As a matter of fact, the situations were so augmenting that even the modern-day politics were driven by nostalgia of the nationalistic kind, but it was more of a personal reminiscence – evoking the days travelling together was a customary and not a taboo, watching sports in the stadiums standing shoulder-to-shoulder with the crowd was a delight and not a peril, sitting in the same pews at the weddings and funerals were an age old enjoyable tradition and not an interdiction. It not only took away our moments of pleasures but changed the way in which the world was earlier perceived. But, as covid strengthened its roots slowly and steadily all over the world, “masks” were made a new mandatory accessory for each and every one. Masks, thereafter, became an integral part of clothing. People now are more concerned for masks than any other daily use commodity. A sudden hype of buying masks was created and with time each and every supermarket, medicine stores, daily commodity shops as well as small road-side vendors started selling masks of different filter qualities, features and colour combinations. With, masks made compulsory all over the country, recognition of people by their faces became a really difficult job. The mask-covered mouths were not recognisable even from a near distance. This had a negative impact on socialisation. As the saying goes, “Humans are social animals” ,and thus, not being able to socialise was the toughest thought to grab in for people. Though, there were constant reminders via different medias such as televisions, radios, caller tunes, social media platforms, newspaper etc., to maintain social distancing and to wear masks all the times, people found it really unsettling to stay at homes for days which later turned into months and then into years! During these hard times when testing positive from covid and staying positive in real life from all aspects were foremost things to do, people started devising new pastimes to keep them occupied.

But, what has been described till now was just Covid being viewed from a lofty vantage point of privilege , the coronavirus lifestyle of the fortunate few! But, this was not the case for all. Corona, brought along with it, severe destructions in lives of people like the minimum daily wage workers, small shop owners, migrant workers and other vulnerable groups and their respective households. According to a report of UNHCR, COVID-related developments, including government-imposed movement restrictions and the associated constraints on nonessential businesses, have reduced overall economic activities. According to a survey conducted by the World Bank in April 2020, 90% of employers reported that cash-flow reductions were preventing their businesses from returning to normal following an easing of lockdown restrictions; the most common strategy adopted by companies for coping with these pressures was to lay off staff. Construction and manufacturing, and service sectors were reportedly the most affected by these layoffs. Unemployment, henceforth increased at a very fast pace. Number of daily wage workers looking for work had increased since



March 2020 after many companies decreased their staff or when workplaces were shut down due to financial issues. As a result there was high competition for work which in turn lowered wages or led to exploitation by employers.

Increase in a totally new set of workers was observed in many sectors and domains, the main reason behind this massive increase being, non-payment of their salaries their previous primary jobs. During the early months of the government imposed lockdown included restriction of movement for people, goods and services. This caused a heavy loss to agri- and livestock businesses as they were unable to travel between rural and urban areas, which made the possibility of them selling their goods in the market nearly impossible and thus a heavy loss of income incurred their way. Due to months of lockdown, products from the farms they worked at could not get sold and as a result, they were either not paid any wages by the business owners or experienced a reduction in their wages .

The UNHCR report further stated that the retail, hospitality, catering and other consumer-focused services were severely affected by the lockdown. Sale of, and demand for products and services decreased after March 2020, leading to a decrease in the number of working days and wages at factories, and the closing of workplaces. There was an imbalance in the demand and supply chain all over the world.

### III. COVID-19 IN INDIA

In India, the first case of COVID-19 was reported on 30 January, 2020, in the southern state of Kerala; this was a student who returned from Wuhan and tested positive for COVID-19, following which aggressive contact tracing followed by 14-day home quarantine for suspected cases were enforced. The state remained on high alert all over. However, it was a contagious virus and hence controlling it was impossible in an over-populous country like India. Hence, till March, 2020, cases began to be reported all across India. Despite the aggressive measures taken by the Indian government to prevent and contain the epidemic, as of August 2020 there were approximately 652,473 active cases, 1,695,860 recovered cases, and 47,138 deaths due to COVID-19 (as per the report of science direct).

Keeping in mind, the ever-increasing impacts of the pandemic, the Epidemic Disease Act, 1897 and Disaster Management Act, 2005 were evoked in mid-march, 2020. This was followed by the suspension of all the commercial, domestic and international flights in March itself. A number of cities and states announced restrictions on public gatherings, dine-in restaurants, or ordered the closure of various non-essential businesses for some time to slow the spread of COVID-19. In order to enlighten the spirits and enthusiasm of people and to unite the entire India together as a family in those troublesome phases, our honourable prime minister Modi, asked all the Indians to observe a 14-hour Janata Curfew ("people's curfew") on 22<sup>nd</sup> March in order to thank essential workers by clapping or ringing bells at 5 p.m. Outside their homes. The major motive behind all these activities were to evoke a sense of nationalism among all.

Looking at the deteriorating condition of the country, the Prime Minister announced a complete nationwide lockdown which was planned to be followed strictly for at least three weeks at the beginning. During the implementation of the lockdown days, all non-critical businesses and services were ordered closed except for hospitals, grocery stores, and pharmacies, and there was a total ban on leaving the homes for non-essential purposes. Along with that, the public transport was suspended.

Soon, as the situation of the country worsened and covid-19 strengthened its grasp all over the nation with the innumerable death tolls, on 16<sup>th</sup> April, 2020, districts were divided into zones using a colour-coded tier system.

Classifications were made on the basis of incidence rates and were divided as –

- 1) "Red" (hotspot)
- 2) "Orange", or,
- 3) "Green" (little to no transmission) zone.

Further, a vigorous research was conducted and it was found that all of India's major cities fell into Red zones. Beginning 20<sup>th</sup> April, 2020, the government relaxed some of it's norms. Agricultural businesses and stores selling farming supplies were allowed to resume operation, as well as public work programmes, cargo transport, and banks and other government centres distributing benefits.

The lockdown was unwound in phases - Phase 3 and phase 4 of the lockdown extended till 31 May, with incremental relaxations and changes. With a little bit improvement in the situation, the country began a phased lifting of restrictions on 8<sup>th</sup> June. This phased lifting of restrictions continued in a series of "unlocks" which extended into November 2020.

#### IV. IMPACTS OF COVID-19 ON INDIA

Ever since the outbreak of corona virus in Wuhan, China, the entire world has changed in many more ways than only one. All the countries across the development spectrum, started grappling with this unprecedented situation in which this seemingly innocuous viral illness, the coronavirus disease (Covid-19), spiralled into a global pandemic in less than 90 days and brought the whole world to a standstill. Henceforth, many new dimensions were added to the angle of world politics and Indian politics. Apart from the devastating effects of the pandemic, including the death toll and the struggling healthcare systems, the virus has left the economies world-wide staggering and even drowning in many parts of the world. India observed largely disruptive impacts of corona virus in terms of economic activities as well as loss of human lives. Almost all the sectors were adversely affected as domestic demand and exports sharply plummeted with some notable exceptions where high growth was observed. Most of the adversities that were brought about during the covid times, on the economy are short term changes, however some may have long lasting impacts. The lockdowns hugely impacted the supply chain management in an unpropitious way and sent the GDP and import cycle plummeting. Indian businesses faced severe atrocities - adverse impacts were observed in three major areas which are linkages, supply chain and macroeconomic factors. This indeed makes it the worst recession since the Great Depression in the 1930s, according to some professionals. The sudden enforcement of lockdown forced millions of migrant workers people migrated from states like Assam, Bihar, Madhya Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh, and West Bengal to Maharashtra and Delhi for work to move out of their cities and return to their homes in the countryside, since they were subjected to a very uncertain situation. Furthermore, due to the lack of transport facilities workers with infants, pregnant women, and the elderly were forced to walk on foot. Experts has it that this henceforth, lead to the second-largest reverse mass in its history after the Partition of India in 1947. However, looking at the unbearable condition of the migrant workers, many organisations (both profit and non-profit) as well as people came forward to help the migrant workers by providing them food and water supplies, transport medium and other daily usable. There were some eminent personalities, like actor Sonu Sood. As well who came up during this time and devoted themselves completely into the welfare of the others. Although all the sectors were facing unfortunate extremities at one level or the other, but there were some sectors which were wrecking down beyond repair. Those sectors include travel and tourism, aviation, telecom, logistics, auto, metals, drugs and pharmaceuticals and retail, automobile, among others, education as we know it, has completely changed and is impacted too.

#### V. MANAGEMENT OF COVID-19

Environment is the only sector that got an immensely positive impact form this COVID-19 scenario. The global disruption caused by COVID-19 commenced impacting our environment and the climate in myriad ways. Due to the lockdown, air flight, and every other possible mode of transportation, along with industries, which were the primary sources of air pollution were ceased. Due to these movement restriction and a significant slowdown of social and economic activities, air quality improved in many cities with a reduction in water pollution in different parts of the world. A sudden reduction in emission of the Greenhouse Gases were observed. Apart from it there was a sharp decrease in the usage of fossil fuels as well. International energy agency reported that global coal use was 8% lower in the first quarter in 2020. According to the article of "The Times of India", It was computed that nearly 50% reduction of N<sub>2</sub>O and CO occurred due to the shutdown of heavy industries, emission of NO<sub>2</sub> from the burning of fossil fuel indicates a sign of reduction in many countries. Furthermore, in countries like India, and Bangladesh (where industrial, and household wastes are dumped into rivers without any procedure), water pollution is considered to be a factor for common disaster. But it was stopped or reduced during the pandemic as major numbers of industries were shut down. Likewise, a sharp reduction of noise pollution was observed. Many beaches were cleaned around the world; the animals were seen back in cities. However, the environment experienced some negative consequences due to the outbreak of Covid-19. Medical waste generation was increased globally, which was a threat to public health and the environment. Biochemical wastes were produced which made it a challenge for the local waste management authorities to tackle the situation. This, further, lead to the degradation of the environment and became a major cause of air, water, and soil pollution.

#### VI. INDIA'S HEALTHCARE MANAGEMENT

During this vital time of a global pandemic, India's healthcare system experienced a massive contingency failure. At that time, the health expenditure in India, when expressed in the form of percentage of the gross domestic product (GDP), turned out to be one of the lowest in the world. This, henceforth, left the country with insufficient doctors, nurses and beds to face an unprecedented situation such as a pandemic. Though, social distancing and home quarantine was the key part of tackling the spread of COVID-19, but a high population density made social distancing challenging. Adding up to the severity of the situation, was the fact that, more than half of the elderly population in India had co-morbidities, e.g. Hypertension and diabetes, which could potentially increase these individuals' risk of contracting COVID-19.

As per the reports of science direct, an enormous difference in health spending was observed, which resulted in major variations in health infrastructure in terms of hospitals, beds, ventilators, etc. Across the states. For example, Jharkhand and Kerala have comparable populations but the number of hospitals, beds and ventilators in the public sector varies by almost 3.5 times. Further, a visible mismatch between the demand and supply chain was observed. The medical infrastructure supply and demand in the public sector posed a big challenge to deal with the increasing number of cases across the country under the prevailing situations.

India's national lockdown in March 2020 was one of the strictest in the world. Despite of that factors like laxity around public health measures, deadly variants and short supply of vaccines and lack of health system preparedness contributed to the overall contingency failure of the Indian healthcare system. The hospitals were packed beyond capacity, dead bodies were burning on mass funeral pyres and desperate pleas were made on social media for oxygen supplies.

As it's rightly said that "every cloud has a silver lining". Despite the adversities we were facing everywhere on the healthcare front, the people of India however were found to be united during these difficult times of global pandemic. They stood by each other and many people even volunteered for social work in several NGOs in order to serve the society in this desperate time of need setting a perfect example for the fact that humanity still prevails. The situation of the country all over embarked a new-found respect for life in the hearts of people. Everyone started valuing the precious gift of life. The prime concern of the people all over the world while tackling with this pandemic situation was to keep them and their loved ones safe.

## VII. REGULATORY BODIES FORMED TO FIGHT COVID-19 IN INDIA

In order to fight and stop the spread of corona virus in India, a number of committees, empowered groups, advisory groups and task forces were formed. Some of them were form even before the onset of pandemic under the National Centre of Disease Control. The names of some of these bodies are as follows:

- 1) National Technical Advisory Group on Immunisation (NTAGI) : it is one of India's apex advisory body on immunization
- 2) Integrated Disease Surveillance Program (IDSP)

Some other bodies were constituted on the onset of the pandemic such as:

- a) ICMR Covid-19 Task Force
- b) National Expert Group on Vaccine Administration for Covid-19 (NEGVAC) : it was formed in august 2020, in order to guide the national vaccine delivery strategy. , in October 2020, NEGVAC advice resulted in the formation of a three-tier state level mechanism for the implementation of the vaccine strategy.

## VIII. MILITARY IN COVID-19

While the Indian Armed Forces are impeccably capable of dealing with the enemies, they're at the forefront to help people during disasters as well. Be it the peaks of the Himalayas, the stretch of desert, dense forests or the depths of seas, the valour of Indian armed forces has always triumphed in every challenge. The Indian forces have always been a saviour to our rescue in the most dire moments of need. Not only in India, but the Indian Army carries relief operations in the other countries in their times of need.

Indian army played a very crucial role in fighting covid-19. They worked on a war footing during the coronavirus disease pandemic and contributed at every possible level ensuring the availability of masks, sanitisers, PPE kits, medical equipment, and hospitals in the country. They provided their full support to the Indian Government during the entire duration of the pandemic.

They took several measures to help India fight against the pandemic. Some of these measures included:

- 1) Setting up of COVID facilities across India
- 2) Setting up of oxygen PSA plants
- 3) Providing domestic and international air and water transport assistance
- 4) Providing medical assistance to civilians
- 5) Providing nursing assistance and truck drivers
- 6) Providing support to centre and states as requested
- 7) Roping in retired military medics
- 8) Providing manpower with specialised skills
- 9) Roping in the National Cadet Corps

The military played a very important role in bringing people stranded in various parts of the world due to the coronavirus pandemic home. The three armed forces i.e. Army, navy and air force, launched and were functioning under Operation CO-JEET to aid anti-COVID-19 efforts, like strengthening medical infrastructure and oxygen supply chains, as well as take measures to ensure mental wellbeing of people. Some other operations like, Operation Samudra Setu 1 was conducted officially between 5<sup>th</sup> May, 2020 and 8<sup>th</sup> July, 2020, which focused on repatriation. Its succession, Samudra Setu 2 was conducted in 2021, which focused on oxygen related transport.

The Indian Military, hence, proved that our soldiers are not only capable of giving a befitting reply to anyone who casts an evil eye on India, but they are fully fledged to provide their fully dedicated support to their nation and it's entire population of 130 crore whenever the time and situation demands of it. Every Indian is indeed proud of the strength and valour of our soldiers. We are proud of their invincibility and their ability to conquer on all the difficulties that they encounter. No power in the world can stop our brave soldiers from guarding the borders of our country.

### IX. PRIVATE SECTORS IN COVID-19

The involvement of Private sector in humanitarian and health crises is not a new phenomenon. With the rapid, geographical outbreak of covid-19, a global supply chain crisis was created, with many countries facing shortages in medical equipment such as surgical masks, oxygen cylinders and ventilators. Looking at the enormity of the challenge, people faced reality check that this pandemic was calling for a whole-of-society response rather than a strong whole-of-government approach. Both the public and private sectors needed to work in tandem in response to the large-scale pandemic. In this context, the private sector stepped in and put in efforts to manage the pandemic. Some of the major steps taken by the private sectors in order to provide relief as soon as they stepped in were as follows:

- 1) In March–April 2020, several companies and organisations donated masks and other pandemic related supplies.
- 2) Several large business groups contributed to the PM CARES FUND.
- 3) Leading Indian corporates have come forward to provide support to hospitals across the country. This includes procuring, setting up and maintaining cryogenic tanks, medical equipment and ventilators.
- 4) Business leaders in India have set up COVID-19 facilities. The chief executive officers of 40 US companies set up a global task force to collaborate on procuring equipment to support India.
- 5) Ola is providing doorstep delivery of medical oxygen.

The National Sample Survey Office's 71st round data shows that private hospitals, clinics and nursing homes provide over 70% of health care. Data on the nearly 10 million treatments received under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) corroborate this finding. Hence, the private sector - both for-profit and not-for-profit segment - are known to be the dominant provider of health services and therefore, had a major role to play in providing relief and healthcare services to people.

Earlier, the Covid-19 testing and treatment were being done in public facilities but with the progression of the pandemic, both the services witnessed a several-fold expansion, henceforth, instigating the private sector to step in as the dominant partner and stakeholder. The stepping in of the private sector was a very important milestone to achieve in order to bring about a series of changes that were mandatory to accomplish in order to fight covid.

### X. DRDO IN COVID-19

Defence Research and Development Organisation (DRDO) is basically a military research and development organisation. But, throughout the Covid-19 crisis, DRDO consistently delivered some of the best plug-and-play makeshift hospitals. DRDO's contribution during the Covid-19 crisis clearly set up an example that how strong scientific organisations can help in a health crisis. The organisation opened a lifesaving 500 bed hospital in Delhi manned mostly by doctors of the Armed Forces Medical Services. After a very short span of time, such facilities were made available to other locations around the country too. Some very notable contributions made by DRDO in combating covid-19 are as follows:

- 1) They developed an antibody detection kit.
- 2) DRDO scientists came up with a quick and effective design for a low- cost ventilator, named DEVEN (acronym for DRDO Economical Ventilator). It was designed by scientists of Institute of Nuclear Medicine and Allied Sciences Laboratory at the Dr. A. P. J. Abdul Kalam Missile Complex, DRDO. DEVEN had features comparable to high-end ventilators with precise measurement and control/adjustment of important patient parameters such as inspiratory pressure, respiration (breathe) rate, inhaling–exhaling (I:E) ratio, tidal volume, and percentage oxygen (fio<sub>2</sub>). It could serve the requirements of a large number of ventilators under the COVID-19 pandemic situation.



- 3) DRDO, repurposed an anti-cancer drug to be used in the treatment of Covid-19. The drug was earlier used in radio-therapy of cancer patients and conducting successful phase I and II clinical trials in brain tumour patients. The repurposing was confirmed after the drug was first tested against SARS-cov-2 as it was a firm believe of the scientists that if the drug showed to be effective against SARS-cov-2 then it would work against Covid-19 as well. The test conducted, however, gave affirmative results and the scientists concluded that at higher and safe concentrations of the drug, negligible virus were detected, which means it not only slows down but completely stops the viral replication/reproduction in infected cells". This drug was then brought to immediate use and its success gave a significant boost to the fight against Covid-19 in the country

Apart from DRDO, other research institutes like ISRO (Indian Space Research Organisation) came forward showing their level of expertise and excellence in combating Covid-19. They used their technical prowess to build SWAAS, which is a portable medical oxygen concentrator. They built a geo-portal BHUVAN-Covid-19 to track the spread of the pandemic.

## XI. THE MEDIA

2020 was the year when a gradual shift of frame on importance towards media was noticed. The major reason behind this shift was that due to the lockdown, we were all inside homes, glued to the screens. Media at this time followed a simple principle of catering to the will of the consumer. With the fragmented, social media-fuelled pop culture environment, the consumer has never had more power. Even the smallest of the things can go viral overnight. A random tweet can derail a blockbuster movie or can start an online movement; a stream of clever tiktok videos can create a star or can destroy the reputation of tiktok into pieces just by spreading mass negativity via negative reviews and one-star ratings. And all the biggest media companies are chasing viewer tastes more intensely than ever, focusing on their streaming platforms as consumers create an increasingly personalized, fractured media diet. However, the year not only brought everyone's undivided attention towards social media, but it brought upon several atrocities over some media platforms. Once the centre of the entertainment universe, broadcast television and movie theatres have been hit hard by the pandemic, which has changed consumer behaviour in lasting ways. , the reckoning over civil rights and racial diversity transformed entertainment TV and journalism. Media, played a very important role in shaping the mindset of people throughout the year. The impact media still holds on people is capable of both progression as well as regression. Hence, one has to choose wisely.

## XII. INDIA CHINA FACE-OFF

While the whole world was reeling under the coronavirus pandemic, India-China disputes was yet again in the headlines after the Indian Army and People's Liberation Army (PLA) troops clashed at the Galwan Valley in Ladakh. India is not new to the age-old practices and motives of Beijing, trying to strong-arm it's way to change the status quo at the Line of Actual Control (LAC). The dispute started when several Indian soldiers were reported injured twice near the northern beach of Pangang Tso, a lake situated in the Galwan Valley Ladakh, which is located in the tri-bordered area of India, Tibet and China with the Line of Actual Control (LAC) passing through it. Two clashes took place, one after the other within a span of a week. Indian soldiers were majorly injured during the clashes since they were taken off guard and hence they fought with sticks, stones and arm-to-arm combat. Videos of this tumult went viral on all the social media platforms, henceforth, culminating the most deadly face-off ever witnessed in decades, between India and China.

On the intervening night of 15<sup>th</sup> June, 2020 and 16<sup>th</sup> June, 2020, another hostility broke out between the soldiers from both the sides. But, this time our Indian soldiers were fully equipped and prepared. They fought invincibly. A great number of Chinese soldiers were assassinated in the melee, the total number of which has not been confirmed by Beijing till date, whereas, on the other hand the casualties on our side included only 20 Indian soldiers getting martyred. Following this clash, the border tension between India and China escalated drastically . Since then, a change in the status-quo at the LAC was observed.

Following the June skirmish, the de-escalation process started, which involved rigorous meeting and talks between the two countries at several levels. The two foreign ministers have had talks, Corps Commander- level officers have had at least three round of talks, other discussions at the diplomatic and military levels have been held but to an impasse. China, however continues to change the make efforts to change the status-quo along the LAC and India continues to push back. Following this event, China kept on trying to change the status-quo over other parts like the Chulsul-Moldo border as well. However, this time again our brave Indian soldiers were successful in spoiling all the evil intensions of China by taking defensive actions against them. Although, China still hasn't given up on its territory grabbing technique of encroaching upon small parts of enemy territory over a large period of time. According to the reports, they were making efforts of strengthening their positions and accumulating troops at other locations like Uttarakhand's Lipulekh Pass, parts of North Sikkim and Arunachal Pradesh.



### XIII. RAFAEL AIRCRAFTS IN INDIA

Amid the continuous border tension with China, India finally worked out an agreement with France to acquire the French aerospace major Dassault Aviation's manufactured Rafael Jets. This was considered to be India's first major acquisition of fighter planes in 23 years after the Sukhoi jets were imported from Russia. The Rafael jets are capable of carrying a range of potent weapons. The missiles which were included in the main weapon package included the European missile maker MBDA's meteor bound visual range (BVR) air-to-air missile, which has the capability to hit targets over 120 km away, and the long range air-to-ground stand-off cruise missile, SCALP, which can strike targets 600 km away. It included MICA weapons system which will be the mainstay of the weapon's package of the Rafael jets. The integration of Meteor into the Rafale weapons system means an Indian Rafale would be combat-ready and would be able to shoot down an enemy aircraft over 100 km away without even crossing the Indian air space. MICA is nicknamed as the "silent killer" for the same purpose.

The incoming of Rafale jets gave India an overall edge over China and Pakistan. We are now armed with the most advanced beyond visual range Meteor air-to-air missiles which have a range of up to 120 kilometres. Meteor has the ability to chase down and destroy agile hostile fighters at even the furthest of ranges and has a no-escape zone many times greater than any other air-to-air missile. The 5.1-metre-long SCALP can be carried in either one missile or two missiles configuration on the Rafale. Its inclusion means Indian Rafales would not have to cross the Indian airspace to hit a target that is about 600 km in enemy territory.

Both, Pakistan and China don't have any missile to conquer it. These Meteor air-to-air missiles will prove deadly during a dogfight and our enemies will stand absolutely no chance before us. Even the Rafale fighters will be armed with Scalp cruise air to surface missiles, which have a range of over 300 kilometres. Thus, India is now, fully equipped and ready to face and conquer any atrocities that comes our way. We are and always will be united as one country and will never let our motherland succumb to any sort of external force which tries to dissever us.

\*\*\*\*\*



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)