

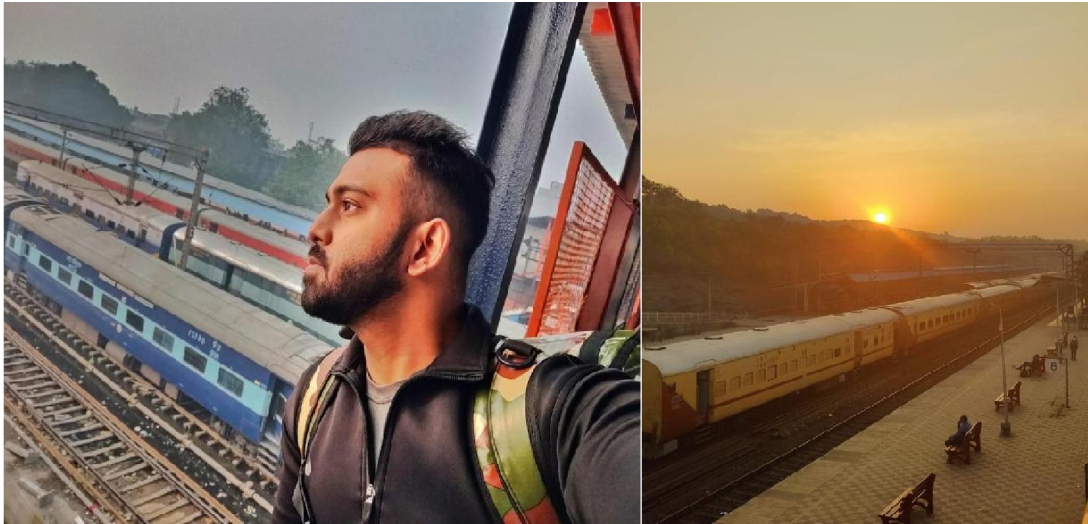
# Vital Role of Indian Railways Battling the Novel Corona Virus (COVID-19 Pandemic)

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Photos by Mohammed Wasim Khan (Author 1)

**Abstract:** *This article discusses the role of Indian Railways during the COVID-19 pandemic, and how the transporter has been helping to support government efforts to combat the virus. Indian Railways have taken upon themselves to rejuvenate the Indian Railway system and invigorate the national fight against the extant Covid-19 pandemic. The railways have been termed as a lifeline of the nation, since it ensures effective functioning of necessary goods and services throughout India. Indian Railways has ensured a phenomenal endeavor in its quest to prevent spread of COVID-19 virus to the greatest extent possible. In view of this, they have taken all best steps to ensure safety and well-being of its passengers. The COVID-19 pandemic has disrupted the lives of people all around the world, and India is no exception. The Indian government, along with many other organizations, have been working hard to combat the effects of the pandemic. One such organization is Indian Railways, which has been at the forefront of the fight against the pandemic. In this blog, we will take a look at the role of Indian Railways in fighting the pandemic and how they have contributed to India's financial resilience. Indian Railways adopted multipronged strategy to fight COVID-19 and more than 2500 doctors and 35000 paramedic staff to meet the COVID-19 challenge in a phased manner. Around 5000 beds in 17 dedicated hospitals and 33 hospital blocks in Railway Hospitals have been identified for treatment of COVID-19 patients.*

**Keywords:** Indian Railways, COVID-19, Railways, Pandemic, India

## I. INTRODUCTION

Indian Railways is the fourth-largest railway network in the world and one of the largest employers in India, with more than 1.3 million people employed. It is one of the most important and reliable modes of transportation in the country. In recent years, Indian Railways has been undergoing a massive transformation, with the introduction of new technologies, services, and infrastructure. With the outbreak of the COVID-19 pandemic, Indian Railways has come to

the forefront of the fight against the pandemic. the Railway coaches were used as COVID Care Centers for the very mild and mild, suspected/confirmed COVID-19 cases. People were screened for the symptoms and clinical conditions and accordingly assigned to the coaches. In case of moderate or severe symptoms, they were referred to the designated centers or hospitals for further management. Standard treatment protocols of the ministry were followed by the trained doctors and paramedical staff deployed to the special coaches for management of cases. Railway Protection Force (RPF) were deployed to monitor the security of the coaches, patients, and staff. Food was arranged by the IRCTC. Proper signage were placed all around the Railway stations. AC temperature of the coaches were controlled. A Basic Life Support Ambulance was also placed in the railway stations. Before handing over the train back for normal use, these coaches should be disinfected and cleared of all biomedical waste. The coaches should be again disinfected regularly by the railways as per the protocol of Ministry of Family and Health.

Railway Board has designated some Railway Hospitals as Dedicated COVID-19 Hospitals or Dedicated COVID Block of Railway hospitals. Railway board has decided numbers of beds for COVID-19 patients in every Railway hospital. Certain numbers of beds have been created as per guidelines of MoHFW for care of COVID patients in Railway hospitals. Railway’s community centers have been converted into quarantine centers; additional doctors and paramedics are engaged to manage added workload due to increasing COVID-19 cases. Railway production units and workshops are manufacturing sample collection booths, additional hospital cots and furniture, HAZMAT suits and coveralls, masks, alcohol-based sanitizers to support Railway Medical facility.

II. LITERATURE REVIEW



**Chandrakant Patel & et. el. (2020)** In the paper railway anesthesiologist and Indian railways COVID-19 management system explored the effects of COVID-19 on anesthesiologist and response management of Indian railways during pandemic by taking rapid and quick action. Organizing and coordinating the deployment and utilization of the medical and all others resources effectively and efficiently in order to minimize the losses and suffering of human lives and recouping the global well-being at large. The analysis of growth and performance of Indian Railways in the era of COVID-19 in terms of anesthesiologist who were frontline leader is expressed. Therole of Indian Railways in COVID-19 management is a praiseworthy and noted work by a public entity for general people’s well-being. IR converted 5321 coaches as COVID care centres. These Coaches acted as Level-1 COVID care centres.

**Singla Ankita and Dr. Singh Balbir (2020)** the researchers conclude that growth of Indian railways is satisfactory for total investment, total capital, number of passengers originating, number of stations etc. Even when the whole world was shattered due to pandemic’s effect Indian Railways’ figures doesn’t disappoint much in terms of operation and investment.

III. METHODOLOGY OF THE STUDY

The main objective of this study is to analyse the performance and the Indian Railways during the pandemic COVID-19. Data are from varying databases like peer -reviewed journals, reports, magazines, news websites, circulars, and books.

### 3.1 Role of Indian Railways in Fighting the COVID-19 Pandemic

Indian Railways has played a vital role in helping the nation fight the COVID-19 pandemic. They have provided an essential service to the country by transporting essential supplies, medicines, and food items, as well as providing logistical support to the government. Indian Railways has also been instrumental in transporting thousands of people back to their homes during the lockdown period. They have also been providing free meals to stranded passengers and have been operating special trains to facilitate medical evacuation and repatriation. Although Due to the pandemic, railways faced a huge financial burden. The government had to bear the cost of running the empty trains, paying the salary of the employees, and the cost of running the freight operations. But Indian Railways provided financial assistance to stranded passengers. In April 2020, Indian Railways announced a financial assistance of Rs.1,500 crore for passengers who had been stuck due to the pandemic. This assistance allowed them to return home, providing much-needed relief during a difficult period.

When the whole world was on lockdown, Indian Railways were continuing its wheels for the transportation of medical and essential commodities throughout the country with the freight trains which were operational 24X7. Parcel trains were initiated between various destinations. Drone surveillance was introduced in some of the stations to monitor physical movements during the lockdown. Jai Kisan special freight trains were scheduled for speedy delivery of farm products and food essentials to different parts of the country. In this new concept two trains which mean 84 (42 + 42) covered wagons are clubbed together to move as a single train carting 5200 tons of food grains to different destinations. Doodh Duronto special trains which are railway milk tankers were introduced in the national interest to transport milk to different destinations. A single tank could hold up to 42000 liters of milk. The special train reached the destination in 36 hours on par with express trains. After the lockdown, the main challenge was to ensure proper thermal scanning of the large number of passengers arriving at stations from special trains. Railway officials coordinated with the district administration to arrange appropriate road transportation to transfer the passengers to their native place and vacate the stations. 3840 Shramik special trains were operational since 12th May from various states across the country. Over 52 lakh passengers moved. Free meals and drinking water were provided to the passengers. These trains were specially started for migrant workers and others who were stranded at different places during the lockdown.

Indian Railways provided financial support to the healthcare sector. They had set up a special fund for the purchase of medical equipment and medicines, and have provided free rail passes for medical professionals. Indian Railways also undertook several initiatives to improve the health and safety of its passengers during the pandemic. It installed sanitizers and sanitization booths at the railway stations, increased the number of medical personnel, and adopted contactless ticketing. It also introduced scheduling of trains to avoid overcrowding and social distancing measures at stations to reduce the risk of infection. It suspended all passenger services and diverted its resources to provide food and safety services to stranded migrant workers by transporting over 6 million people in just over a month. It deployed more than 2500 doctors and 35000 paramedic staff to meet the challenge in a phased manner. 5231 rail coaches were converted into Covid-19 care centres to help the public.

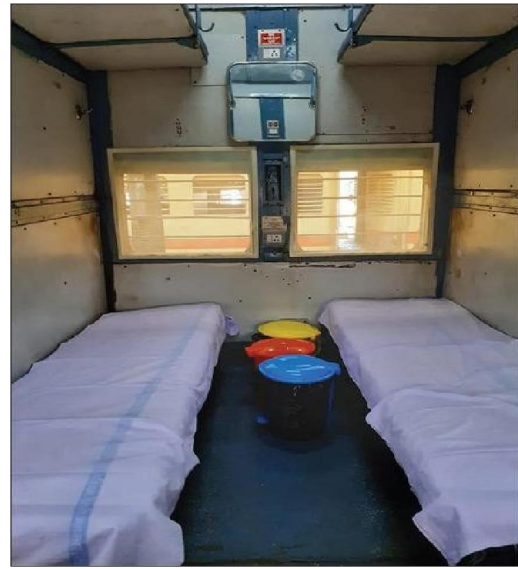
## IV. THE IMPACT OF INDIAN RAILWAYS

### 4.1 On the Financial Resilience

Indian Railways has been instrumental in ensuring financial resilience during the pandemic. They have provided financial relief to millions of people in the form of free tickets, discounts, and waivers. They have also waived off the booking and reservation charges for the tickets booked through their website and mobile app. This has enabled people to avail of the services of Indian Railways without having to worry about the financial burden. Although, registering a 70% fall in passenger revenue due to the coronavirus pandemic, Indian Railways took some of the most commendable steps in FY21 to ensure its passengers and general public are safe while travelling.

Indian Railways has also taken steps to reduce their operating costs by reducing the number of staff and running fewer trains. This has helped them to save money and ensure the financial resilience of the organization. Additionally, Indian Railways has been providing financial support to the railways employees in the form of salary hikes and bonus payments. This has enabled the employees to remain financially secure during these tough times. Indian Railways also provided assistance to migrants, who were rendered jobless, travelling to their native places. More than 3.3 million

migrant workers, students and others from across India were sent home in over 4000 Shramik Special trains, using Indian Railways network. This enabled thousands of people to return to their homes safely amidst the pandemic. The freight business of Indian Railways grew rapidly to meet the growing demand of transporting core commodities like coal, cement, and iron ore. To supplement the efforts of the health care delivery system, the Railways connected different medical equipment, PPE kits, and ventilators.



#### 4.2 On the Healthcare Sector

Indian Railways has had a major impact on the healthcare sector during the pandemic. They have been providing free medical services to the people and have been transporting medicines, vaccines, and other medical supplies to remote areas of the country. This has helped to ensure the availability of medical services in these areas and has enabled the healthcare sector to remain operational during the pandemic.

Indian Railways has also been providing free rail passes for medical professionals, which has enabled them to travel to different parts of the country to provide medical services to the people. This has helped to ensure that medical services are available in the remote areas of the country. Additionally, Indian Railways has also been providing free meals and accommodation to the medical professionals, which has enabled them to remain financially secure during the pandemic. It provided medical supplies to hospitals and set up dedicated COVID-19 coaches to treat COVID-19 patients. Since the outbreak of the coronavirus pandemic, Indian Railways converted 5231 rail coaches into Covid-19 care centers in India and followed all guidelines issued by the government for safety. This effort of Indian Railways was highly appreciated by people across India. To fight the pandemic, Indian Railways made its healthcare division more efficient by doing railway anesthesiologists and having railway doctors available for public service. The railways hospitals were developed with wards for basic ventilator management and pandemic health care. Besides running freight trains, they started to carry medical equipment's, staff and quarantine facility centers for pandemic patients. Along with that, it is provided isolation coaches for doctors/staff who were directly involved in carrying out medical duties amid the Covid-19 pandemic. It also ensured that all medical equipment's are supplied to various states for proper treatment of patients. Indian Railways did an excellent job in providing necessary health care to people during the time of crisis, besides running freight trains which have become more important than ever before during this pandemic.

#### 4.3 On the Supply Chain

Indian Railways has been instrumental in ensuring the continuity of the supply chain during the pandemic. They have been transporting essential items, including food, medicines, and other supplies, to remote areas of the country. This has helped to ensure that the people in these areas have access to essential items. Additionally, Indian Railways has also been transporting raw materials and finished products to different parts of the country, which has enabled the manufacturing sector to remain operational during the pandemic.

Indian Railways has also been working with the government to ensure the smooth functioning of the supply chain. They have been providing logistical support to the government in the form of transportation and storage of essential items. This has enabled the government to ensure the availability of essential items to the people in remote areas of the country. As one of the government's major sources of revenue, Indian Railways used its resources to help finance relief and recovery efforts following the outbreak of the virus. It donated ₹20 crores to the Prime Minister's CARES Fund to support relief activities and to contribute towards India's fight against the pandemic. A special parcel train was also instrumental in transporting 5.2 million tonnes of food grains across the country. All the efforts made by Indian Railways during the pandemic proved to be very successful in containing the spread of the virus and providing relief to the people.

#### 4.4 On the Business Models to Accommodate the Pandemic

Indian Railways has transformed their business models to accommodate the pandemic. They have introduced new technologies, including contactless ticketing and e-ticketing, to ensure the safety of the passengers. They have also launched mobile-based payment solutions to enable passengers to purchase tickets without having to visit the railway station. Additionally, Indian Railways has also launched an online platform for the booking and cancellation of tickets, which has enabled people to book tickets from the comfort of their homes.

Indian Railways has also been providing special services to the people during the pandemic. They have been running special trains for medical evacuation and repatriation, as well as providing free meals and accommodation to stranded passengers. This has enabled the people to travel safely and securely during the pandemic.

### V. CURRENT CHALLENGES FACED BY INDIAN RAILWAYS & SCOPE OF IMPROVEMENT

Indian Railways has faced several challenges during the pandemic. The lockdown imposed due to the pandemic has had a major impact on the organization, as it has resulted in a significant drop in the number of passengers. This has resulted in a decrease in the revenue of the organization and has made it difficult for them to meet their financial obligations. Additionally, Indian Railways has also been facing issues related to staff shortages and the availability of medical supplies.

Indian Railways has been doing a commendable job in fighting the pandemic and has taken several steps to ensure the financial resilience of the organization. However, there is still scope for improvement. Indian Railways can take steps to further improve their services and make them more efficient. They can introduce new technologies, such as artificial intelligence and machine learning, to enable the passengers to book tickets and make payments more conveniently. Additionally, they can also introduce new services, such as on-demand trains and mobile-based payment solutions, to enable the passengers to avail of the services of Indian Railways without having to visit the railway station.

### VI. CONCLUSION

It is impeccable how Indian Railways rose to the challenge of providing its services while also helping to combat the virus during these tough times. Indian Railways efforts to provide relief to its commuters during the pandemic is an example of the commitment of the public sector towards public welfare. The efficiency of the railway network undoubtedly helped mitigate the pandemic- and it will be remembered for its unwavering service.

The Railways were used extensively during the lockdown period to transport essential goods. Additionally, the Railways manufacturing units came up with several innovations to fight the pandemic and have manufactured right from a few basic hospital furniture like stretchers, beds, medical trolleys to ventilators. The production units also produced consistently PPEs like masks, apron, sanitizers, and face shields for railway employees, doctors, and paramedics across the nation. Based on the guidelines issued by the Ministry of Family Welfare and Health, the IR has successfully trained their staff to work remotely. It played a vital role in helping the nation fight the COVID-19 pandemic. They have provided an essential service to the country by transporting essential supplies, medicines, and food items, as well as providing logistical support to the government. Additionally, they have provided financial relief to millions of people in the form of free tickets, discounts, and waivers. They have also been instrumental in ensuring the continuity of the supply chain and providing special services to the people during the pandemic.

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