

**A Project Report on
EXPORT/IMPORT OF AIR CARGO IN INDIA-AN ANALYSIS**

*A dissertation submitted to the School of Maritime Management, Indian Maritime University in partial fulfilment for the requirements for the award of degree in
MBA- Port & Shipping Management*

Submitted

by

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2022

DECLARATION

I, ANOOP M (**Reg. No. 2003304008**), student of School of Maritime Management, Indian Maritime University Chennai Campus, hereby declare that this project report titled **Export/Import of Air Cargo in India-Analysis** submitted in partial fulfilment of the requirement for the degree of **Master of Business Administration in Port and Shipping Management** is my original work carried under the guidance of my project guide. It has not formed the basis for the award of any Degree/Diploma of any University/Institution. The information submitted is true and original to the best of my knowledge.

A rectangular box containing a handwritten signature in blue ink. The signature appears to be 'ANOOP M' with a stylized flourish.

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Date: 25 MAY
2022

CERTIFICATE

School of Maritime Management Indian Maritime University, Chennai.

This is to certify that the project report entitled “Export/Import of Air Cargo in India-Analysis.”, submitted to the School of Maritime Management, Indian Maritime University, Chennai Campus., in partial fulfillment for the award of the degree of Master of Business Administration in Port & Shipping Management, is a record of work carried out entirely by Anoop M, Reg. No 2003304008.

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EXECUTIVE SUMMARY

The Indian air transport business has grown rapidly, notably in the domestic market. The domestic Indian market completed its 46th straight month of double-digit year-on-year rise in June 2018, an extraordinary performance that shows no indications of easing anytime soon. In India, the air transport industry employs around 390,000 people and supports another 570,000 in the supply chain.

Overall, the business contributes over \$30 billion to India's GDP each year. The primary drivers of air passenger demand, such as population and demography, as well as rising earnings, are all favorable and supportive of long-term expansion.

The proportion of estimated average passenger flights is expected to climb by more than 350 million over the next 20 years, reaching over 520 million journeys in 2037, according to IATA predictions. Today's aviation logistics in the country is plagued by several major challenges such as excessive dwell periods, untraceable freight, damaged cargo, lengthy cargo processing times and lines at cargo ports, and so on.

Air cargo infrastructure in India is rarely built for medium and long-term needs, hence it is severely insufficient and overburdened. It is commonly known that the present cargo operations at airports are a stumbling barrier to the expansion of this business. The current situation in India's air cargo logistics sector can be attributed to a lack of effect of economic, complicated regulatory processes and procedures, insufficient and poor-quality human resource deployment, and a lack of adequate technological implementation of the cargo handling supply chain.

The sector must continue to collaborate constructively with its major stakeholders – including the government and policymakers – to ensure that this significant growth in demand is satisfied and that India reaps the full advantages of the air transport industry.

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LIST OF ABBREVIATIONS

AAI – Airport Authority of India

IATA – International Air Transport Association

DGCA – Directorate General of Civil Aviation

GDP – Gross Domestic Product

ICMS – Integrated Cargo Management System

SEZ – Special Economic Zone

CAGR – Compound Annual Growth Rate

CFS – Container Freight Station

ICD – Inland Container Depo

ATFI – Air Trade Facilitation Index

ETI – Enabling Trade Index

TEU – Twenty-foot equivalents

CHAPTER - I

INTRODUCTION

1.1 Background & Significance of the Study

The purpose of logistics is to get the cargo to the location at the correct time in the appropriate shape at the lowest feasible cost. The transfer process is efficient and provides the customer with a value-added service while reducing time. At this moment, the concept of air freight was born. Air transportation and the regular exchange of goods between distant points within a few hours has helped improve living standards and industrial development in many developed and developing countries. Over the course of the last three decades, air cargo traffic gradually increased, showing the sudden boom of all air freight networks. The development of air cargo has surpassed even the wildest dreams of every optimist in the age of wide-bodied aircraft. There are many items that can now be shipped through air freight, from apples to elephants. The air freight industry now transports items which are short life span items as well as items like life-saving drugs. In the jet age, air freight is the only way to meet the ever-increasing demands of business logistics. A network of airfields costs less than building roads and railroad lines between several places, when compared to other modes of transport such as rail and road. Air cargo can carry any type of cargo within the specified dimension. In the Air cargo comprises all air freight, air express and airmail etc.

The air freight business is also important for a country's economic prosperity. Among the key players in the Air Cargo chain are airlines, air cargo terminal operators, ground handlers and forwarders, domestic cargo transporters and custom house agents. Consequently, the Air cargo industry consists of a wide variety of service providers whose single-minded purpose is to move goods faster and more efficiently, both domestically and internationally. Several government agencies oversee the air cargo industry, but chief among them is Customs. Air cargo chains that offer faster services make many businesses more competitive. More than one-third of global commerce value is transported by air. The air cargo industry is, from the airline's point of view, considered a barometer of global economic health, as air freight services represent for 13.34 percent of the airline's revenue Over the last two decades, India's international air commerce to GDP ratio has more than doubled, rising from 4% to 8%.

Given the importance of air cargo to Industrial growth, the Ministry of Civil Aviation established a Working Group on Air Cargo and Express Services Industry to provide recommendations on long-term policy measures to tackle important issues as well as the prospects for higher growth in India. All the key stakeholders of the air cargo industry in India were represented by members of the working group led by the Economic Advisor from the Ministry of Civil Aviation. A working group was formed to examine and reflect on the problems of growth prospects in India, particularly as economic growth accelerates, and to suggest areas for further improvement. Several prominent participants gathered on a single platform to debate and discuss the problems of development potential.

According to the IATA report, by 2035, air cargo volume in India will grow eight times to ten times its present level. To respond to a growth of this magnitude, it is necessary to expand infrastructure facilities, simplify procedures, and adopt information technology / automation in addition to developing human resources within the industry.

1.2 Scopes of the study

Following are suggested scopes of the study which are as follows-

- Air cargo sector is highly linked with GDP of our country with government initiatives entry of foreign players will boost the sector.
- India Air cargo sector is gradually developing introduction of cargo hubs, logistics parks & SEZ will generate employment in this area.
- Development in the Air cargo segment will also boost the Revenues of Domestic Airline Companies.

1.3 Objectives of the study

The objectives of the study are as follows-

- To examine the procedure involved in air cargo imports and exports.
- To analyze the Air cargo throughput between 2015 to 2021
- To study of the current state of the Indian air cargo sector and the demand for air cargo movement.
- To suggest various means to improve the air cargo transportation in India.

1.4 Methodology of Analysis

As a researcher I have used and accessed secondary data to study my research project and have analyzed and evaluated the data to find the conclusion of my research topic. Primary information has been not obtained rather secondary data are available in sites. I have gone through many articles and reports which made my project in appropriate sense and information.

The method which I have applied in my research is Trend Analysis to compare the past and present data 's in the form of graphical representation & pie-charts so that I can assess what trend the Air cargo sector witnessing at present.

1.5 Collection of Data's

The researcher used secondary data to prepare this report. Mostly Magazines, article published in newspaper, reports are used to collect the data. Though secondary data are already analyzed by others, the researchers further analyzed and brought the desired output. So, in this report mostly secondary data are used. The main reason why researcher chosen secondary data is.

- It can be access quickly and cheaply.
- A larger geographic area and a longer reference period may be covered at little expense. As a result, using secondary data broadens the researcher's geographic and temporal scope.
- Secondary data increases the size of the database from which scientific generalizations may be derived.

1.6 Chapterisation

The following chapter's contain introduction which is almost on the air cargo of India to get it how this venture been carried upon with that the scope of study to be projected for understanding the development of the Air cargo. Literature reviews provide an overview of the various authors who have contributed their research on respective topics and their understanding on the topic gives the importance of the work so further increase the scope of development in social and environmental value. A brief introduction to air cargo in this chapter helps the reader have a better understanding of what air cargo is and how shipping it can have an impact on the world stage. In this chapter, describes the importance and operation of major airports in India for the air cargo industry.

Analyzing the air cargo business of India in this chapter, various statistical methods are used to understand the position and forecast the development of the industry so that further steps are taken accordingly.

In the last Chapter there is a conclusion and suggestion being given to enhance in the Air cargo industry in India.

CHAPTER II

REVIEW OF LITERATURE

2.1 Overview

As a part of research process, it is necessary for researcher to undertake a literature review which represents the previous researcher in related to Air cargo. Source of literature being review in this project involves article, books, conference proceedings, which can be access through library, electronic database such as business source premium etc. together with internet. The air transportation business is unquestionably a significant component of domestic and global economies, there is a wealth of literature on many elements of airports and the airline market, such as forecasting air transport demand from rural airports. Access to air travel and economic performance Air transport customer analysis using neural modelling, liberalization, and sustainability. There are few papers available on Indian air transport sector but as far as air cargo industry is concerned, limited research has been done. In today's economy, air cargo sector has become indispensable to facilitate global trade, logistics and supply chain management. So there exists strong demand for predicting air cargo growth.

Since economic growth is regarded as the primary driver of air cargo demand, the prediction of China's air cargo is based on the link between air cargo demand and economic development, as determined by econometric technique, and GDP projections are derived. by trend analysis same way this paper will indulge in the same approach to estimate the growth in Air cargo of India.

As the author (Mayurapriya, M, Harishkannan, B) mentioned that the air cargo demand in India is slated to top and is grew at a CAGR of 12.8% P.A from 2002- 2007. Assignment pursuits at searching on the boom and the models of operation inside the industry. There are 2 primary modes of operation – the Hub & Spoke and the factor to point models. Of the two, the hub & spoke model is visible to had been the most customary in noticeably developed economies together with the United States. With the aid of measuring the price and the time factors, the model pursuits to give a case for the movement of the industry toward one of these models. Currently there are not any pure-play shipment gamers except for Blue-Dart within the industry. This factors to the reality that the important thing driver of routes will be the passenger volumes and no longer the shipment volumes. And as expected shipment volumes provide for less than 10% of the revenues for the incumbents. However, with developing cargo volumes, it would be

increasingly more vital & worthwhile to use shipment as a prime revenue movement & both hub & spoke or the P2P models could be dominant. Consistent in the analysis, the hub & spoke version could be more price powerful per tonnage of cargo movement whilst in comparison to the factor-to-factor version. That is in the main due to trip based totally costs that is prices incurred on every occasion a flight performs between two nodes being primary inside the value calculations. Charges which include gasoline & aircraft leases which might be calculated based on the flying time increase with growing volumes carried. Some other factor that enhances the fee efficiency of the hub & spoke version is the economies of scale received by way of pooling the assets on the hub. Therefore, the in keeping with unit expenses also are pared. The key sample that the document identifies is that the marketplace would gravitate towards the hub & spoke model within the destiny; the cargo vendors would prefer to have dedicated shipment fleet over the passenger-cum-shipment mode of operation presently observed. However, if a player were to pick out to function within the P2P style, he could gain from using the passenger-cum-shipment mode for operation.

As Author mentioned Over the last few decades, the food sector in India has gained attention from around the globe due to the immense potential the geography, climate, and soil offer. Although it is the world's largest food producer, its food exports are not well-known. A lack of infrastructure for supporting the cold chain, the supply chain of perishables, is blamed for the low export figures. There are concerns that need attention, like huge losses of perishables due to insufficient infrastructure. It is estimated that there is about \$2.35 billion worth of perishable food wasted each year due to factors such as: insufficient precooling and storage facilities, lack of refrigeration carriers, a fragmented supply chain, an insufficient application of cutting-edge tools and technologies, and a lack of professionals. Despite the importance of cooperating among private corporations, government agencies, farmers, cooperatives and federations, the building up phase is only in its infancy. The management of the cold chain ensures that spoilage is reduced, harvested products are preserved and are delivered to the consumer efficiently given adequate attention to customer service. The chain has one main characteristic: if any of the links are missing or weakened, the whole system fails.

2.2 Challenges of Air Cargo Industry

2.2.1 Rapidness and Efficiency to test

In recent years Air cargo companies have a difficult time maintaining cold storage for Coronavirus vaccines. Traditionally, air freight cold chains are capable of handling temperatures between +2 and -8°C. They can even store cargo at -20°C. When it comes to vaccines made by Pfizer and stored at -70°C, what happens? The vaccines stay colder than an Antarctic winter. We need a better logistic strategy to combat this issue.

To prevent vaccine degradation, special boxes and temperature-controlled unit loading devices (ULDs) are used. Although this is not an excuse, ground handling agents still must carefully monitor the temperature of freight throughout the shipping process. This can be accomplished through software solutions. By sending drivers notifications, the system ensures conformance with Service Level Agreements (SLAs) by informing them about the temperature of ULDs in real time. Furthermore, telematics can facilitate location-based optimization and the advancement of tasks through operational awareness. The transport process is then made more reliable and safer because handling operations are executed with increased productivity.

2.2.2 Facing Capacity Shortages

Border restrictions put new challenges on air cargo companies as an effort to contain the spread of the pandemic. Carrier networks had to be downsized, and many planes were stored long term in remote locations. Tones of goods were affected by this change.

The distribution of vaccines requires better utilization of the aircraft fleet. Up to 15,000 flights are estimated to be required to inoculate the globe's 7.8 billion people, according to a study from DHL and McKinsey. Moreover, the International Air Transport Association (IATA) calculates that enough single-dose vaccines would need to be transported by 8,000 Boeing 747 aircraft to reach all people on earth. Comparing these numbers with actual fleet sizes, which seem much smaller, the data is surprising.

To deal with current logistics challenges, passenger jets will play a crucial role. The belly holds of passenger planes typically carry between 45 percent and 50 percent of freight. Despite months of severe declines in passenger counts, IATA predicts a 62 percent increase in travel in 2021. This will occur, albeit at a glacial rate. As a result, airlines will almost certainly continue to convert passenger widebodies into complete freighters. Although this technique may assist with the capacity issue, aviation experts believe it is only a temporary answer.

2.2.3 Managing Available Resource

One of the most difficult tasks for air freight operators will be to determine resource availability. Maximizing the use of infrastructure, employees, and equipment is critical as aviation stakeholders pursue cost-cutting methods. Because demand is still variable, long-term allocation planning may not be as precise as it was before the outbreak. As a result, the most effective way to make optimal staffing decisions is to use dynamically modified plans based on real-time data.

Dispatchers must be able to react promptly to happenings to guarantee that COVID-19 vaccination shipments are processed efficiently. Technology now makes this possible. Tour planning and driver assignment are made easier with smart cargo software. Detailed algorithms allow for unambiguous work prioritizing, resulting in optimal vehicle use each trip. If exceptions must be handled, a user-centric Graphical User Interface will make it simple to do so (GUI). Further resource usage opportunities are estimated automatically, leaving the user to make the ultimate risk and benefit decision.

2.3 Air cargo Operation

A shipper, a forwarder, an Aircraft carrier (or trucker), an airline (or service), and a consignee are all involved in air freight transit from origin to destination. The shipper intends for the goods to be delivered anywhere in the world at a low cost and at the necessary carrier level. The forwarder serves as a "middleman" between the shipper and the airlines.

The road carrier provides ground transportation services before air delivery. The airline receives, stores, transfers, tracks, loads, and unloads cargo, as well as allocates and handles potential passengers.

The shipment is delivered to the consignee, and the air freight transit approaches are depicted (Kasilingam, 2003). This provider supply chain involves a variety of airlines, including integrated suppliers and passenger and freight combo airways.

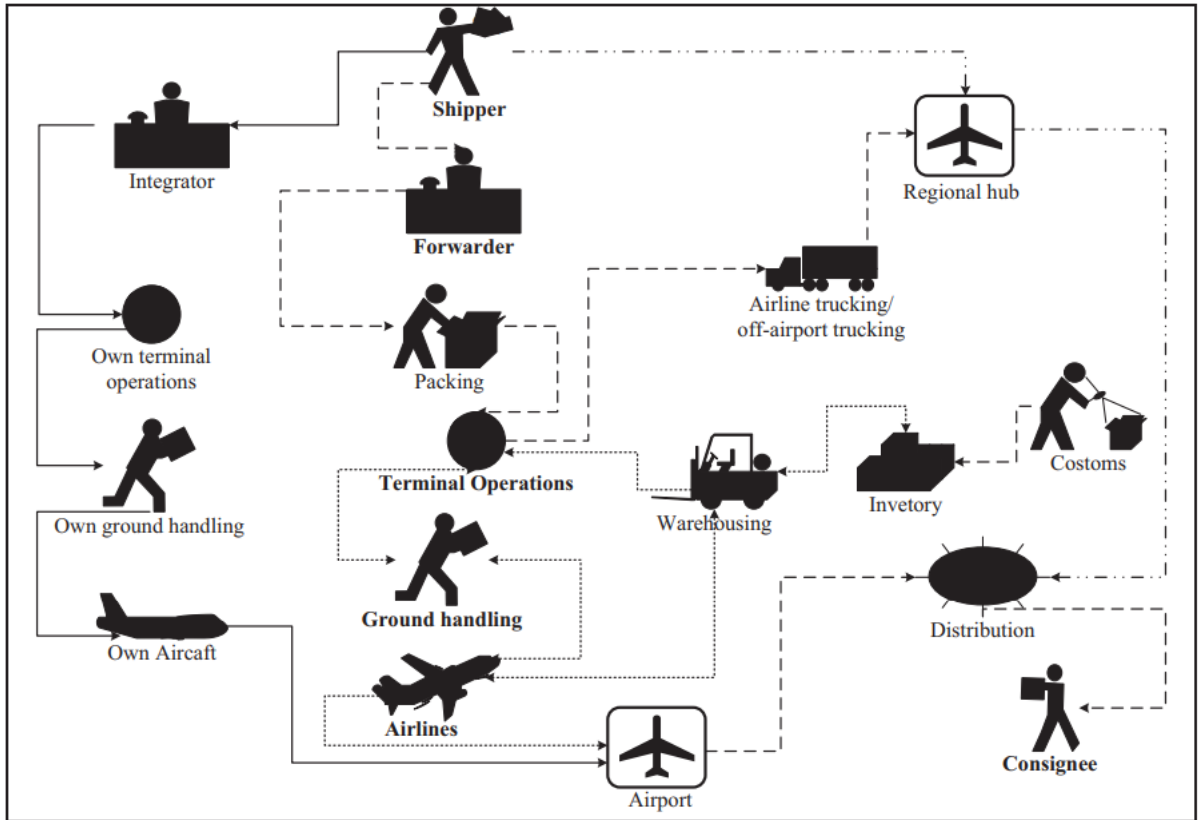


Fig: 2.1

In addition to flying passengers, combination airlines are able to deliver air freight, air programs, and mail onboard passenger aircraft. Dedicated freight aircraft are also available. Many aggregate airlines operate 'combi' planes which can be altered to increase or decrease cargo capacity by removing or adding seats. Integrated express service providers (e.g., FedEx, UPS, and DHL) and non-integrated freight providers (e.g. UPS, FDX, and DXP) constitute all-shipment carriers.¹ Integrated services companies primarily promote ability directly to shippers (direct channel market), but in addition they sell surplus capability to freight forwarders (indirect channel market). Direct channels have identical supply chain shapes and incorporated and non-integrated carriers face by and large similar selection problems. Direct channel markets have centralized service provider selection difficulties, which means that airlines and forwarders do not play games on pricing and capacity allocation as in the decentralized market. Integrated express carriers can therefore make choices that are considerably simpler than non-integrated providers, because of their decentralized decisions. While examining the air shipment industry, we consciousness the possibility of the case of combination airlines being representative.

CHAPTER III

AIR CARGO AND ITS SIGNIFICANCE

3.1 Air Freight

The transport of goods by air, or air freight, is a fast and efficient method. Although air freight is the fastest way to deliver goods internationally, it has historically been the most expensive method of delivery.

There are two types of air cargo – general and special cargo.

- **General cargo** has valuable items, such as jewelry, pharmaceuticals etc. Despite the higher shipping costs than shipping by sea, air freight is the optimum method of shipping electronic goods due to the high margins and fragile nature of many electronic goods.
- **Special cargo** demands specialized transportation conditions, in particular temperature control, specific air conditions, or special enclosures (e.g., if the goods are hazardous or livestock).

3.2 Advantage of Air Freight

- **Time** – It is much faster to transport goods via air freight than by shipping, rail, or road.
- **Reliable** – Flights normally have consistent arrival and departure schedules with little delays, therefore cargo shipping by air is quite certain to turn up on time.
- **Low insurance premium** – Since the cargo length is so short, air freight insurance rates are often cheaper.
- **Secure** – Goods shipping via air is strictly controlled by security, thus the likelihood of cargo being seized or destroyed is negligible.
- **Less warehousing requirements** – Air freight clearance time is quick, and there is often less goods to unload than cargo ships, so customs procedures is quick, and the demand for regional warehousing is significantly reduced.

3.3 Amendment of Air cargo

The Department of Cargo performs a variety of functions at air cargo terminals and, in accordance with the AAI Act of 1994, creates, operates, and manages cargo terminals at airports around the country for the processing and storage of commodities. An act as a custodian of international cargo under Section 45 of the Customs Act of 1962.

Following the creation of Joint Venture Companies at several of the Indian Airports and Cargo Terminals controlled by AAI, a competitive environment for cargo handling was developed in order to give the best services to Cargo Stakeholders. In this regard, AAI has designated Ground Handling Agents under the GHAAct-2007 to provide equipment and staff for 15 airports around the nation in order to carry out airline and cargo tasks on behalf of airlines/AAI. Departmentally, AAI handles international cargo in Chennai, Kolkata, Lucknow, Coimbatore, Trichy, Amritsar, Guwahati, and Mangalore Airports, and through the O&M Model at Varanasi, Bagdogra, Bhubaneshwar, Calicut, Vizag, Jaipur, Ahmedabad, Indore, and Goa Airports.

Domestically, according to its road map, AAI has identified 24 airports across the country for the establishment of Common User Domestic Air Cargo Terminals (CUDCT), from which Port Blair, Coimbatore, Jaipur, Chennai, Amritsar, and Lucknow (outbound) Airports are run departmentally, and Raipur, Madurai, Vizag, Indore, and Mangalore Airports CUDCT are managed on an O&M contract basis.

AAI and MoCA see the need of decongesting airports and encouraging Air Freight Station operations in tandem with the availability of ICD/CFS facilities for Sea Cargo. MoCA has already published rules requiring all airports to develop a distinct channel for the transportation of packed containers and AFS operators to provide infrastructure, comprising screening of export cargo, in their facilities to ensure seamless upliftment at airports. Since 1999, AAI has managed air cargo terminals using it was well Integrated Cargo Management System (ICMS) at Mumbai (JVC), Delhi (JVC), Chennai, and Kolkata Airports. AAI upgraded its existing Integrated Cargo Management System (ICMS) based on the requirements and upgrades of the Customs EDI programme, and plans to change or update much farther based on the latest requirements, along with execution for e-Freight adherence, Web-based collection management including mobile application, and IT for domestic cargo handling.

Elevated Transfer Vehicle (ETV) capability has been added to the Chennai and Kolkata airports for palletization/ULD handling, and the import cargo wings have been outfitted with an Automatic Storage & Retrieval System (AS&RS) for increased handling capacity and modernity.

3.4 Stakeholders

It is critical to understand the business models of various entities and procedures involved in the overall Air Cargo business, as those were not the same for everyone working in the Air Cargo/Express Delivery service market in India. International air cargo is focused with the transportation of commodities by air on international flights for both imports and exports of cargo to and from India. Domestic air cargo is concerned with transporting commodities by air via domestic flights within the country. Cargo delivered by passenger through the belly area of an aero plane is one variation, while cargo transported by specialized freight aircraft is another.

In addition, as compared to traditional General air Cargo services, Express Delivery Service has developed as a prominent commodity in recent years. Air Express providers provide express delivery services with regular passenger planes. Express airlines, both local and international, operate dedicated freighters and have their own set of needs depending on client demand, volume growth, and so on.

While air carriers receive most of the focus in the traditional model of international air cargo business, freight forwarders and other affiliated services play significant roles in the growth of air cargo operations. Freight forwarders augment or completely replace the carrier's in-country sales activities in many developing countries, while also executing customs agency and other key responsibilities on behalf of clients.

Forwarders are important to carriers in markets where carrier frequency are less likely to keep their own sales personnel. Despite being a vast market with a rising presence of global cargo operators (sometimes through acquisitions and collaborations with domestic firms), India has a significant presence of national freight forwarder. National forwarders are believed to frequently have unusually strong relationships with national carriers, allowing their customers access to the valuable restricted capacity of such airlines during busy seasons.

This business, like the other relevant business activities being addressed here, is extremely fragmented in India.

3.5 Express Delivery Service

The globalization of commercial transactions, the transition to just-in-time production and inventory control procedures, and the rising need for companies of all sorts to send items swiftly by air to distant customers are the primary driving reasons behind the creation of Express Delivery Services. The global air express sector is both international and domestic. Speed of service, door-to-door delivery, including fulfilment of all cross-border regulations, tracking system, evidence of delivery, reliability and security, and access to worldwide connection are the major elements of the Air Express sector.

The Courier, Express, and Parcel (CEP) market in India is expected to develop at a CAGR of more than 10.5 percent, owing to increased e-commerce activity, increased internet penetration among the general public, and technical advancements in the industry.

As major corporations joining and extending networks in the industry, India has become an important market for both local and international shipping. For enterprises to be properly aligned with market trends and dynamics, innovation has become a crucial influencing force. In 2018, India had rapid growth in package quantities, increasing by 21% year on year to 2.5 billion. Global package volume increased to 87 billion in 2018, up from 74 billion in 2017. In terms of strength, the organised segment, which consists of a few businesses, controls around two-thirds of industry sales.

TNT, FedEx, DHL, and UPS are among the top worldwide integrators in the organised industry. While FedEx, UPS, and TNT run their own overseas freighters, DHL has commercial cargo airline partnerships. Blue Dart, First Flight, DTDC, Dkypak, Overnight, Professional Couriers, and many more are important participants in the domestic market.

The research focuses on the top participants in the India CEP Industry. The market is extremely competitive, with a few competitors controlling most of the international CEP industry. The market is fragmented, and it is likely to increase throughout the projection period. The key players Indian key industry companies such as FedEx Express, DHL Express, E-com Express, Ekart Logistics, Blue Dart, Delhivery, Amazon Transportation Services, and Aramex are substantially contributing to the market's growth. The Indian Postal Service has moved its attention away from post and toward delivering e-commerce parcels, which has proven to be more profitable. In rural locations, Indian Post has a wide reach and reliable connection.

Blue Dart Aviation is a major player in India's Express Aviation market. As a result, the air cargo industry is divided into three types: combination carriers (passenger airlines that use a portion of their "belly-hold" capacity to carry cargo and could also operate separate air cargo fleets, conventional all-cargo carriers that operate both scheduled and charter services, and integrated (express) carriers that operate their own fleet of aircraft and delivery vehicles that provide overnight, door-to-door service.

Logistics firms, particularly in the CEP market, must be cautious about technological expenditures that might disrupt the business. The implementation of the Goods and Services Tax (GST) in the country has also had a significant impact on the online/e-commerce logistics business since all indirect taxes have been consolidated into one. It enables logistics organizations to improve the flow of goods inside the country.

Maintaining consistency in service quality while controlling costs is a challenge for all market participants. Given the rapid advancement in internet business and the fact that constructing one's own system is prohibitively expensive, more associations are expected to emerge in the industry because of weight on cost decrease. The growing relevance and need for last-mile transportation are forcing market titans to drive their operations even more creatively.

3.6 Domestic Air cargo

In recent years, the Indian air transport business has experienced rapid expansion, notably in the domestic market. The domestic Indian market completed its 46th straight month of double-digit year-on-year growth in June 2018, an extraordinary performance that shows no indications of abating anytime soon. In India, the air transport industry employs around 390,000 people and assists another 570,000 in the supply chain. Altogether, the industry contributes over \$30 billion to India's GDP each year.

The primary drivers of air passenger demand, such as population and demography, as well as rising earnings, are positive and supportive of long-term expansion. Over the next 20 years, IATA projects an average annual growth rate of 6.1 percent - the amount of annual air passenger flights is expected to climb by more than 350 million, reaching over 520 million in 2037. The sector must continue to collaborate constructively with its major stakeholders, including the administration and authorities, to ensure that this significant rise in demand is satisfied and that India reaps the full advantages of the air transport business.

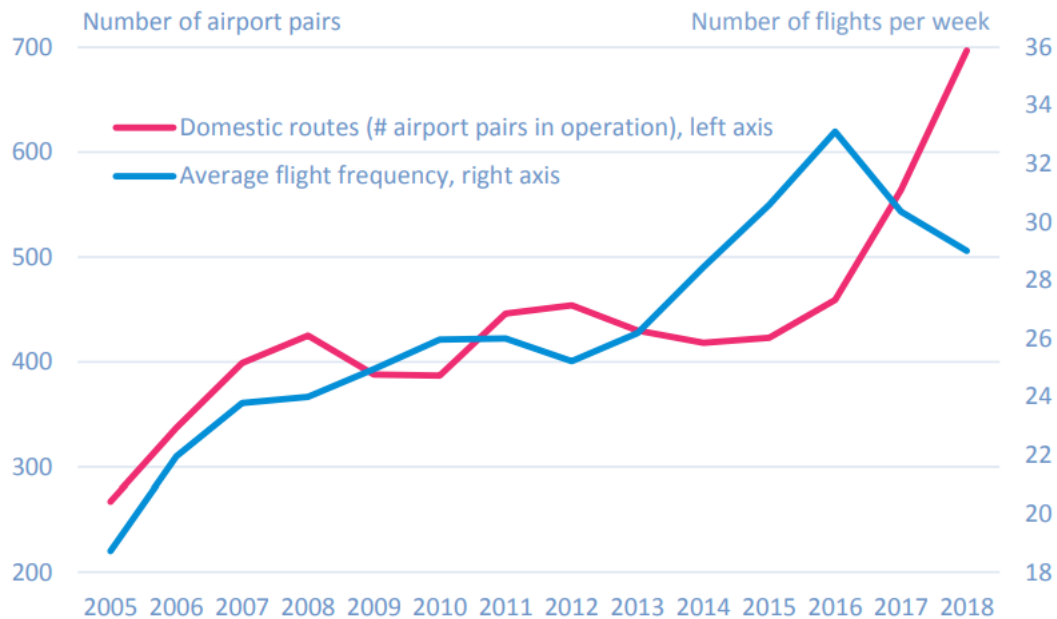


Fig:3.1

Source: Aviation Submit

This is apparent both in terms of a significant growth in the number of airport pairs in operation inside India (which has increased by more than 50% since 2015) and rises in the average frequency of flights on each route. With nearly 272 thousand metric tons of freight carried on domestic flights, Delhi's international airport stood at the top of the list. Following that came Mumbai's Chhatrapati Shivaji Maharaj international airport, which carried 152.38 thousand metric tons. In all, the country had a 28% decrease in domestic freights compared to the previous fiscal year 2020. As of now, the air traffic report – October 2021 shows a change of 55.5 percent, according to the All-Indian Airports report.

3.7 World Air Cargo

World Air Cargo is the aviation industry's bright light in terms of demand, but availability remains limited, and shippers are paying higher prices.

Information recorded over the last year by the International Air Transport Association (IATA) and air cargo data services business CLIVE show a rising trend in demand for air cargo services, albeit it does decrease 4% in May 2021. According to IATA, this is due to increased worldwide industrial production and cross-border commerce.

According to IATA, "supply chain interruptions and resultant delivery delays have resulted in extended supplier delivery times—the second-longest in the history of the manufacturing PMI."

"Typically, this implies that producers employ faster air transport to recuperate wasted time in during manufacturing process".

CLIVE figures for April 2021 show an increase in air freight volumes of 78 percent over April 2020 and 1 percent over April 2019. CLIVE researchers underline how high load factors continue to put a pressure on international air cargo, especially because the customary rise in summer capacity has yet to materialize.

According to CLIVE analysts, while April 2021 rates may be like April 2019, total capacity was dropped 18%. Available capacity in May 2021 was 21% lower than in May 2019. According to the analyst study, "this demonstrates the gap in airline capacity is expanding further compared to pre-pandemic market circumstances following the -18% number in April and -14 percent in March". Data from May 2021 reveal +41 percent increase in chargeable weight, +42 percent increase in throughput, and +1 percent point boost in dynamic load factor as compared to the same month in 2020, when COVID limits caused considerable disruption to the worldwide aviation business. The "dynamic load factor" calculates how full an aero plane is by taking both cargo volume and weight into account.

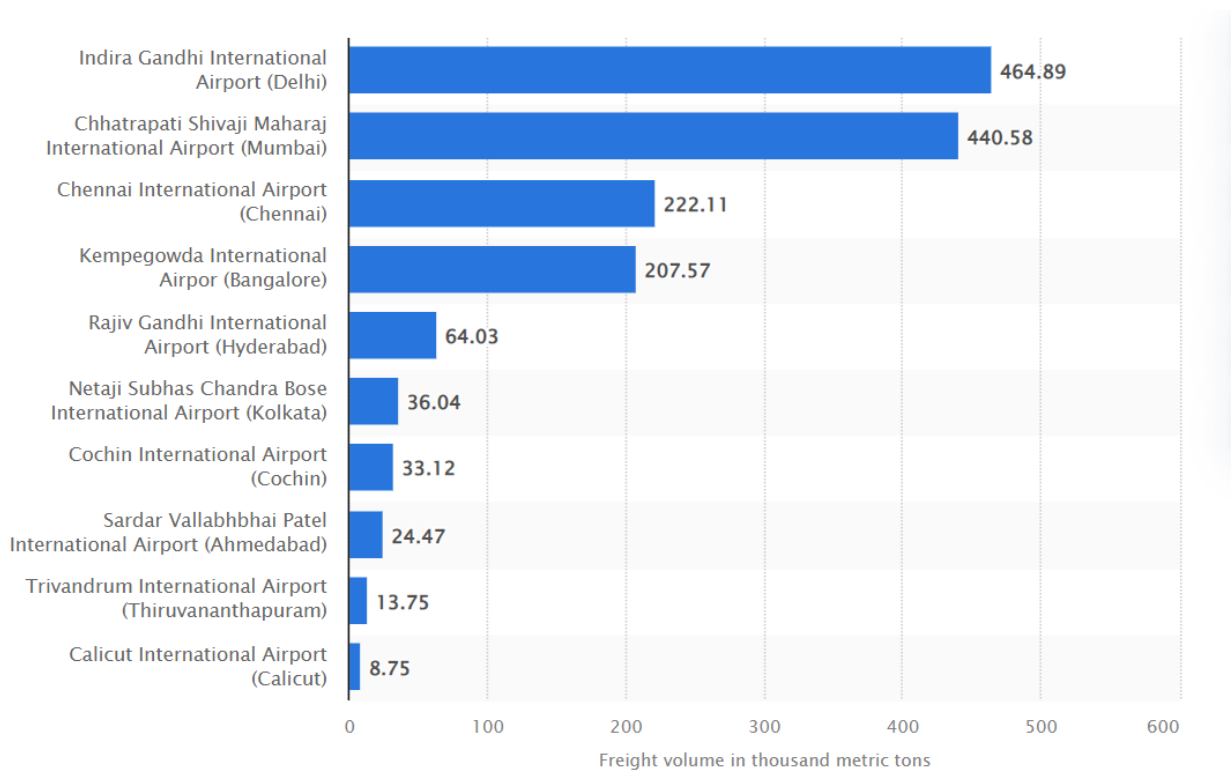
"Airfreight capacity is tight on many critical trade corridors, so prices remain robust as economic activity heats up, but passenger flight capacity remains constrained owing to international travel restrictions," says Gareth Sinclair of TAC Index, an air cargo market intelligence service. "The Baltic Air Freight Indices [weekly transactional rates for general cargo as given by freight forwarders] climbed by 3% in May over April, down from the 17% gain witnessed in April over March."



Source: ACI, IATA WATS

Fig: 3.2

In 2017, Mumbai and Chennai airports were listed among the top ten fastest expanding in the world. In 2017, these two airports had 18.1 percent and 17.2 percent growth, respectively. In terms of international rankings, Delhi and Mumbai are ranked #29 and #31, respectively, among the 50 largest airports for freight handled. As of present, with the demise of Covid-19, Delhi and Mumbai are the finest cargo-handling airports in India, with worldwide rankings of 50 and 52. Indira Gandhi Foreign Airport in Delhi was rated top in the graph below, with far more than 460 thousand metric tons of international freight handled in fiscal year 2021. Mumbai, which used to be first, has dropped to second place with roughly 440.

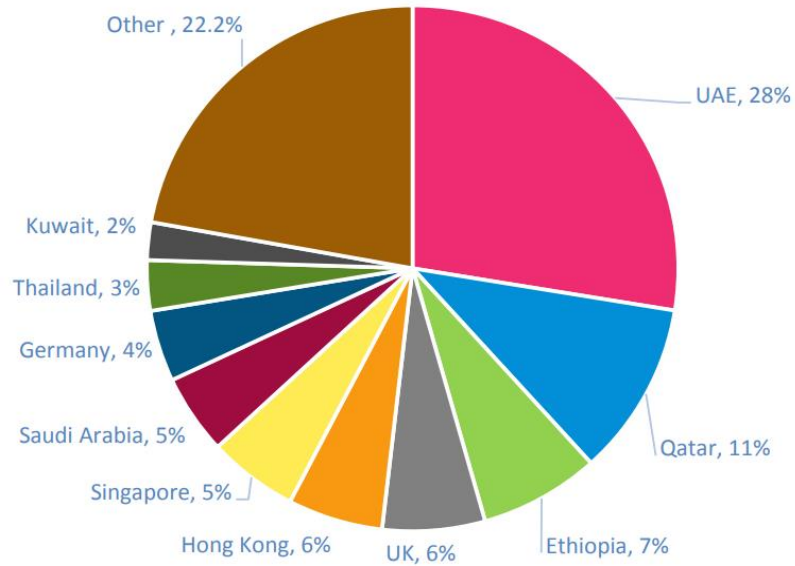


Leading airports in India in financial year 2021, by international freight handled (in 1,000 metric tons)

Fig: 3.3

The above volume shown by India International Airport in the year of 2021 in which the Delhi airport has maximum handled cargo as follows the Mumbai airport, Chennai Airport, Bangalore Airport as follows.

The value has been taken from the secondary source of Statista which measured on 1000 metric tons the value came out on Delhi airport is 464.89 which is approximately 30% more handling capacity compare with other airport, the Delhi airport has always shown significant number in every aspect of passengers and cargo handling in the domestic region as well as international region. The covid-19 hit the market in all international level still Delhi airport has managed all those hurdles and achieved well.



Source: IATA

Fig: 3.4

The pie chart above depicts the participants in the air freight industry in 2017. This is especially true considering India's incorporation into global pharmaceutical value chains, which has been a strong growth driver for the air freight industry in recent years. Nonetheless, the Indian air freight business had excellent expansion in 2017. With a robust double-digit growth rate of 16.9 percent, total cargo tonnage flown from India surpassed one million tonnes in 2017. The top 10 trading partners for Indian air freight account for over 78% of the total. The UAE leads the way with about a 30% market share, followed by Qatar with 11%. It illustrates India's top ten air cargo trading partners' relative market size (in tonnes) and yearly growth rate. While the UAE is undoubtedly the largest market by some distance, Ethiopia was the fastest growing market, more than doubling its cargo tonnage with India in 2017. Kuwait and Thailand are also worth mentioning, with both nations seeing year-on-year growth of more than 30%. Hong Kong was the only one of the top 10 markets to have a decrease in cargo tonnage with India in 2017, down 0.3 percent from 2016.

CHAPTER IV

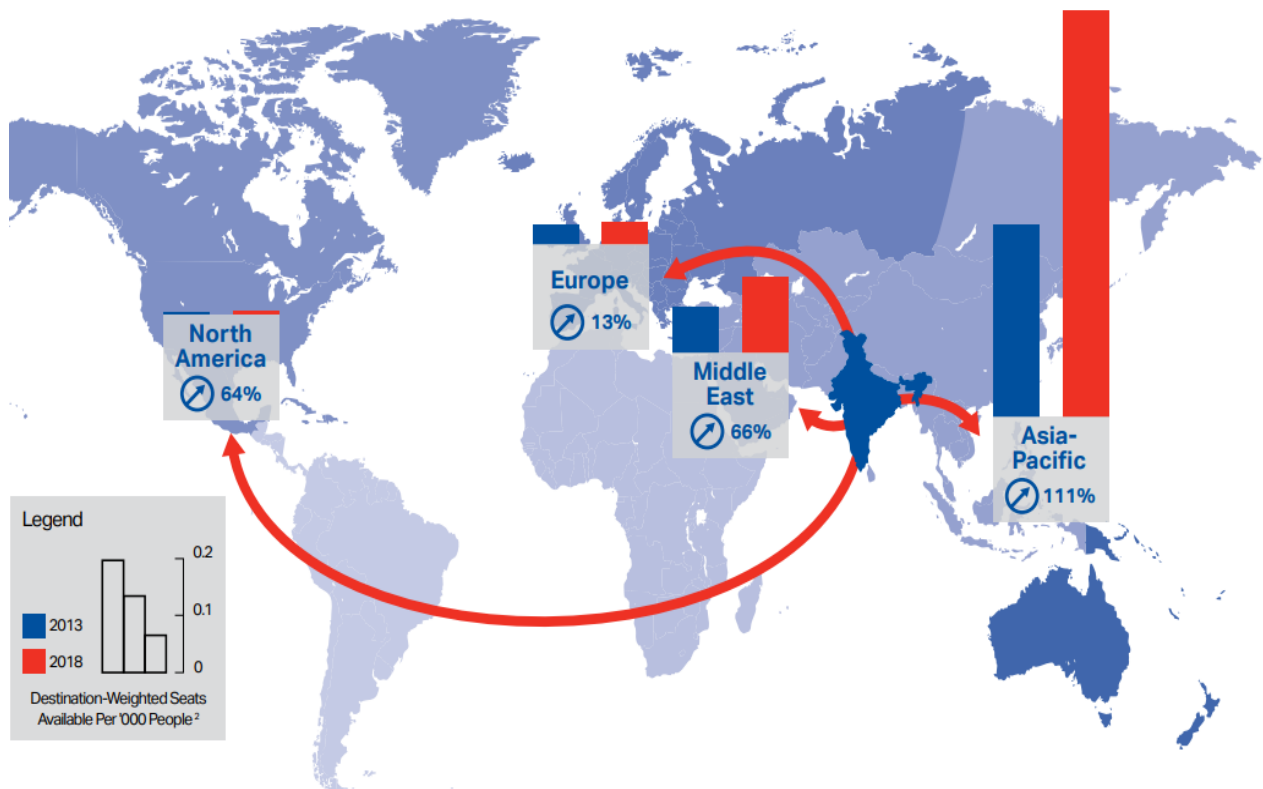
CURRENT SCENARIO OF INDIAN AIRPORTS

4.1 India Air Freight

The Airport Authority of India owns 125 of India's nearly 460 airports. In 2019, total passenger traffic in the nation was over 345 million. Aircraft movements rose throughout that year as well. In 2019, there were around 2.6 million total aircraft movements. However, the industry's development pace has slowed dramatically after Jet Airways' demise. Despite the fact that the departure of one of the largest private aviation businesses has created chances for other domestic rivals, the pressure on one of the two full-service carriers, Air India, to begin international operations has undoubtedly intensified. The air freight sector is defined as the money earned by air freight transportation. The Indian air freight sector generated total sales of \$963.4 million in 2020, showing a 1.3 percent compound annual growth rate (CAGR) between 2016 and 2020. Due to the COVID-19 pandemic for air freight industry has very inappropriate year of 2020. Due to COVID-19, store closures and huge problems in international supply chains harmed the value and volume of the air freight sector in 2020.

In Air Trade Facilitation Index, India rank 51 among the 124 nations, and for e Freight Friendliness Index has rank 44 out of 135 countries. India also ranked 102 out of 136 nations for Enabling Trade Index which is for facilitating the free movement of across the country boarder till destination.

Map of India's air connectivity, by its largest markets (segment basis)⁴



Fig; 4.1

Source: IATA

4.2 Major Airports in India

In 1912, the first domestic aviation route between Delhi and Karachi was established in India. Since those early days, civil aviation in India has grown rapidly, with changes in carriers and ground infrastructure. Indian airports, which were not considered to be of global standards only a few decades ago, have dramatically improved, with as many as three Indian airports being named among the finest in the world. Air travel in India has developed at an unprecedented rate in recent years, making India's domestic civil aviation sector the fastest expanding in the world. It is presently considered as the world's third largest domestic civil aviation market (after the United States and China). According to predictions, India's civil aviation sector would become the third-largest in the world by 2024.

The expansion is being pushed by way of airport modernization, the success of low-fee providers, overseas funding in home airlines, and emphasis on local connectivity. Huge

improvements of main airports in India had been undertaken, with the vast enter of personal companies, and are nonetheless persevering with as potential is being stretched. India now has a few lots improved, smooth new airport terminals. Here are some details below of the airport.

4.2.1 Indira Gandhi International Airport, New Delhi

Indira Gandhi International Airport (DEL) is one of India's major and busiest international airports, serving the state of New Delhi and the country's capital, Delhi. The airport is in Palam and serves as a main hub for the majority of the country's leading airlines. Every year, the airport handles over 40 million passengers, and many of India's most prestigious organizations named DEL the greatest airport in the country.



Fig; 4.2

Indira Gandhi International Airport (IGIA), located in Delhi, is the city's principal civilian aviation hub. Since 2009, it has been the busiest airport in India in terms of passenger traffic and cargo traffic, and it is named after the late Prime Minister Indira Gandhi.

In 2016, IGI was the world's 21st busiest airport and Asia's 10th busiest airport by passenger traffic, processing over 55 million people. It has been crowned the world's number one airline for the second year in a row in the 25-40 Million Passenger Per Annum (MPPA) category.

The IGIA became India's and South Asia's largest aviation hub once operations at Terminal 3 began in 2010. There is an expansion initiative in the works that will boost the airport's capacity to 100 million passengers by 2030.

In During January 2021 to December 2021, Delhi International Airport handled 9.3 lakh metric tons of cargo, the highest total volume of cargo handled by any airport in the country that year. The Delhi Airport handled 9.3 lakh MT of cargo in 2016, of which 3.3 lakh MT was domestic and 6 lakh MT was international. The main products handled by Delhi Airport were ready-made garments (RMG), electronic goods, pharmaceuticals, medical supplies, and automobile/machine parts. Furthermore, the airport company stated that about 27% less cargo was handled in 2020 compared to the first year of COVID, and the airport was also closed for about two months due to lockdown.

The aviation ministry designated Delhi Airport as the major hub for handling Covid-19 relief material, which also contributed to the record handling of cargo.

Around 2,000 MT of COVID-19 Relief Cargo was handled on over 150 cargo relief flights at the airport. More than 38 million PPEs/Medical supplies were handled at the airport, including body suits, ventilators, oxygen concentrators, temperature guns, gloves, etc.

Despite major disruptions caused by COVID in global supply chains last year, Delhi Airport recorded robust cargo growth. The impact was possible because the airport has a strong international connectivity and DIAL has worked with its stakeholders to maintain smooth Cargo operations and drive recovery to pre-COVID levels.

4.2.2 Chhatrapati Shivaji International Airport, Mumbai

The Mumbai airport is well-known due to its location in India's financial center. It is also one of the most major airports in South Asia, handling over 30 million people and a large portion of the country's aviation freight. It is India's second busiest airport and an important hub for inbound Middle Eastern passengers. The airport has five terminals and has undergone extensive renovations in recent years.

The Air shipment complicated, positioned west of the international passenger Terminal 2, has been in operation since 1977. The shipment apron is capable of coping with 5 extensive-bodied aircraft. In 2009–10, the airport dealt with 385,937 metric tonnes of worldwide shipment and 165,252 metric tonnes of home shipment. Air India (AI) and Mumbai international Airport Pvt Ltd (MIAL) have been appointed as custodians of shipment through the relevant Board of Excise and Customs at

Mumbai. The shipment Terminal has a Centre for Perishable shipment (CPC) with an area of 1844 m² for perishable and temperature sensitive global export shipments, strong rooms of a hundred and fifteen m² for storage of precious cargo and garage regions for dangerous items in both import and export warehouses, committed Unaccompanied luggage coping with and clearance regions and 9 coloured X-ray cargo screening machines for export cargo.



Fig; 4.3

Aside from managing 65% of the worldwide volumes at CSIA, MIAL additionally operates a common person home cargo Facility. After taking over the redevelopment paintings of the airport in 2006, MIAL commissioned an offshore commonplace consumer Terminal (cut) close to the Marol

pipeline as a temporary arrangement. In June 2016, MIAL opened a new domestic shipment reduce close to the Western specific toll road in Vile Parle.

The reduce has been outsourced to Concor Air Ltd. On a build-function-transfer foundation. The terminal has the capability to address 300,000 metric tonnes of cargo annually and is constructed on an area of 60,000 rectangular feet. The shipment Terminal is an "increased terminal shape" where all arriving domestic cargo is managed from the basement level at the same time as departing cargo is dealt with on the higher stage. Air India and Blue Dart handle their personal home cargo operations at their very own terminals. On February 7, 2019, Blue Dart launched its dedicated cargo facility near Terminal 1 at Mumbai International Airport. The facility measures 4,300 rectangular meters and has airside and town-aspect get right of entry to, bearing in mind faster switch of shipments.

4.2.3 Bengaluru Kempegowda International Airport (BLR)

With almost 33 million travelers a year, Bengaluru's airport is India's third busiest. This iconic new airport was developed on a greenfield land by a private firm and opened in May 2008. As a result, it has been advanced in two parts. The second phase began in 2015 and comprises the construction of a second runway and terminal. For the time being, the airport has only one operational terminal, which serves both international and domestic aircraft. During the winter, Bengaluru airport frequently reports fog problems in the early mornings. If you go, be prepared for flight delays and cancellations. During the Calendar Year 2021 (CY 2021), Kempegowda International Airport (BLR) processed an all-time high tonnage of 406,688 Metric Tonnes (MT) of cargo, a considerable increase of 28.6 percent compared to 316,305MT in 2020. This is 7.2% more than the pre-COVID-19 tonnage of 379,348MT in 2019..



Fig; 4.4

International freight increased by 32.8 percent, with 265,873MT handled in comparison to 200,209MT in 2020. Domestic freight increased by 21.3 percent, with 140,815 MT handled compared to 116,096 MT in 2020. The primary trade pathways from BLR Airport remain the United States and Europe. Freighters to and from BLR Airport are operated by 13 airlines to various local and international destinations.

Perishables (including agricultural and poultry products), pharmaceuticals, chemicals, and textiles are driving growth in the exports category, while electronics, heavy machinery, healthcare, and life science items are driving growth in the imports category. Notably, BLR Airport has emerged as the "No. 1 Airport in the Country" for perishable exports, accounting for 31.0 percent of all perishable shipments in India during FY 2020 to 21.

Hari Marar, MD and CEO of Bangalore International Airport Limited, said, "The great recovery in air cargo is a positive sign for the aircraft industry, which was severely impacted by the pandemic." BLR Airport's cargo growth was driven by a resilient ecosystem that enabled efficient operations round the clock, focus on supply chain efficiencies, a favorable geological location, and the right mix of commodities, as well as adequate airline capacities to major world markets.

4.2.4 Chennai International Airport (MAA)



Fig; 4.5

In 1978, the Chennai Airport's air freight facility was built, when all regulatory and facilitating organizations were brought under one roof for quicker processing/clearance of worldwide shipment, to cater for air shipment motion within the southern location. Chennai International Airport is India's fourth busiest and the key hub for arrivals and departures in South India. It handles more than 20 million passengers a year and is owned, operated by the Indian government. Flights are generally divided across three terminals. The airport is being enlarged and refurbished in order to boost its capacity to 40 million passengers per year. These projects involve the construction of a new globally integrated terminal (Terminal 2), the reuse of old terminals, and the internal connection of all terminals. At the shipment terminal, AAI capabilities as floor managing agency for airlines for dealing with or processing their shipment on ground and acts as custodian on behalf of customs import/export cargo under the customs act of 1962. Spread over an area of 19.5 acres, the complex makes use of shipment-dealing with equipment's along with elevated transfer automobile, forklifts, high-mast stackers, and energy hydraulic pallet vehicles for managing shipment. The protected place of the export wing of the complicated is 20,595 sqm whilst that of the import wing is 20,090 sqm. The existing included location of cargo terminal in occupation of AAI is 37,0.5 sqm. There are 3 ETV construct-up/running stations and 18 manual construct-up ETV loading positions

at the complicated.

The cargo complex includes two divisions, specifically, the export and the import facilities. The export facility covers an area of 16,366 sq.M and the import facility covers sixteen,500 sqM. The complicated has a special cargo apron that may accommodate 3 extensive-bodied aircraft with ULD parking region and hydrant-refueling facility on the bay. The Customs branch has appointed AAI and AI because the custodian at the complicated. The import cargo of all the airways is purely treated through AAI. The export cargo, then again, is dealt with by means of AAI in appreciate of airlines handled by it while those of the relaxation of the airways are treated by AI.

4.2.5 Rajiv Gandhi International Hyderabad Airport

Rajiv Gandhi International Airport situated in Hyderabad, it's a capital of Telangana. It is in Shamshabad, about 24 kilometres (15 mi) south of Hyderabad. It inaugurated on 23 March 2008 to replace Begumpet Airport, which was only airport serving in the Hyderabad. It is named after Rajiv Gandhi, India's previous Prime Minister. It is India's largest airport in terms of area, with 5,495 acres (2,224 hectares). It has also been named one of the top ten airports in the world by Air Assist. Between April 2021 and March 2022, it was India's fourth busiest airport in terms of passenger traffic, with 12.4 million people and 140,075 tonnes (154,406 short tonnes) of cargo.



Fig; 4.6

GMR Hyderabad Air Cargo (GHAC) is cent percent subsidiary from GMR Hyderabad International Airport Limited (GHIAL).

GHAC is tremendously can handle the physical handling of cargo and documentation related services, additional services include warehouse handling, which includes the assembly and disassembly of ULDs, general monitoring, tracing and discrepancy management, customs interface, and so on. GHAC operates a world-class cargo terminal that handles bulk freight, express cargo, and mail. Our terminal is India's first of its type, and it has transformed cargo handling performance and quality. Both domestic and international parts have been developed inside the same terminal structure to support the seamless flow of transit cargo. Our cargo terminal is outfitted with cutting-edge cargo handling technology and is monitored by CCTV cameras around the clock. GHAC has adopted tried-and-true cargo handling rules, procedures, and processes based on worldwide best practises, which have been certified by many famous airlines throughout the world. In addition, our terminal includes a world-class cargo management system which has been particularly developed and created for the Indian market.

4.3 Import and Export Procedure of Air Cargo

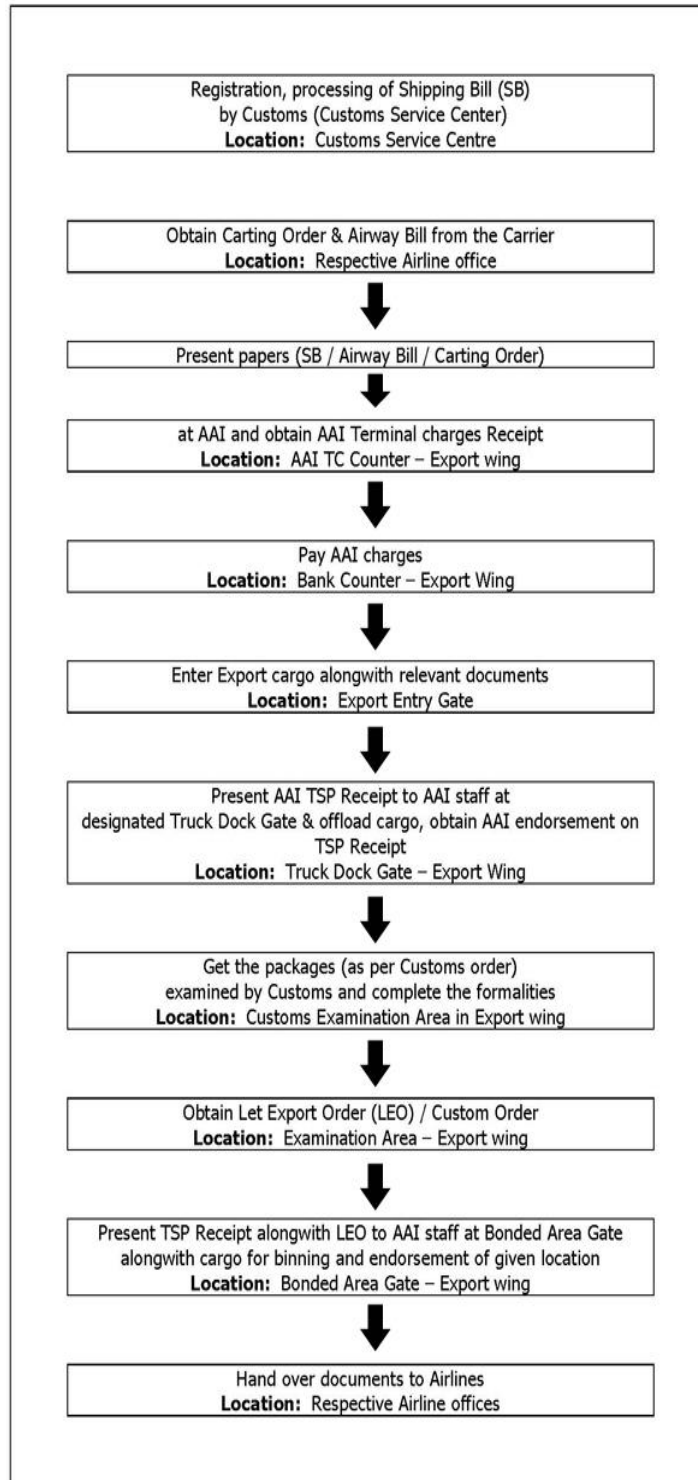


Fig: 4.7

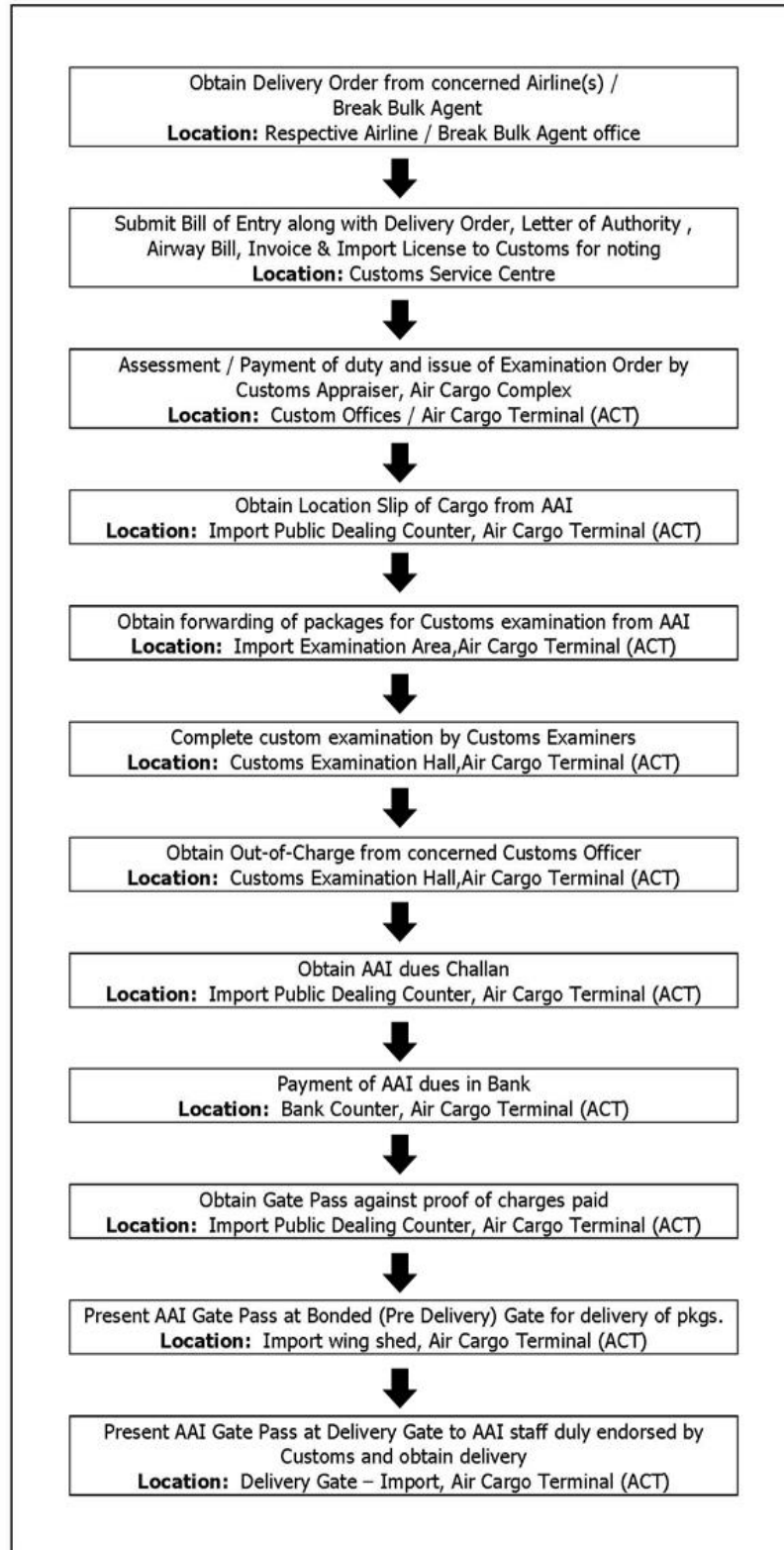


Fig: 4.8

CHAPTER IV

ANALYSIS OF AIR CARGO THROUGHPUT

The Consolidation of Air cargo of India as year on year which is showing in a tremendous growth except those pandemic year. These data have been collected from DGCA website taken in the consideration of those value which is contributed to the Air cargo in India. The below data are Import/Export of Air cargo in India.

YEAR	Import	Export	Total
2015	560737.3	887775.4	1448513
2016	570518	893201.2	1463719
2017	667292.6	1013916	1681208
2018	723559.9	1074479	1798039
2019	630122	1016861	1646983
2020	413532.6	594760.1	1008293
2021	448294.2	568889.2	1017183

Source: DGCA

Tab: 5.1

The economic consequences of air travel may be calculated in a variety of ways. According to IATA, three elements are examined: the jobs and spending produced by airlines and their supply chains, the trade, tourist, and investment flows generated by consumers of all airlines serving the country, and the city pair ties that enable these flows. All of them offer a unique yet insightful viewpoint on the relevance of air travel. As we can analyst that Air industry is how much contribution is given to the national value where the jobs perspective is 6.2 M jobs and 1.5% GDP.

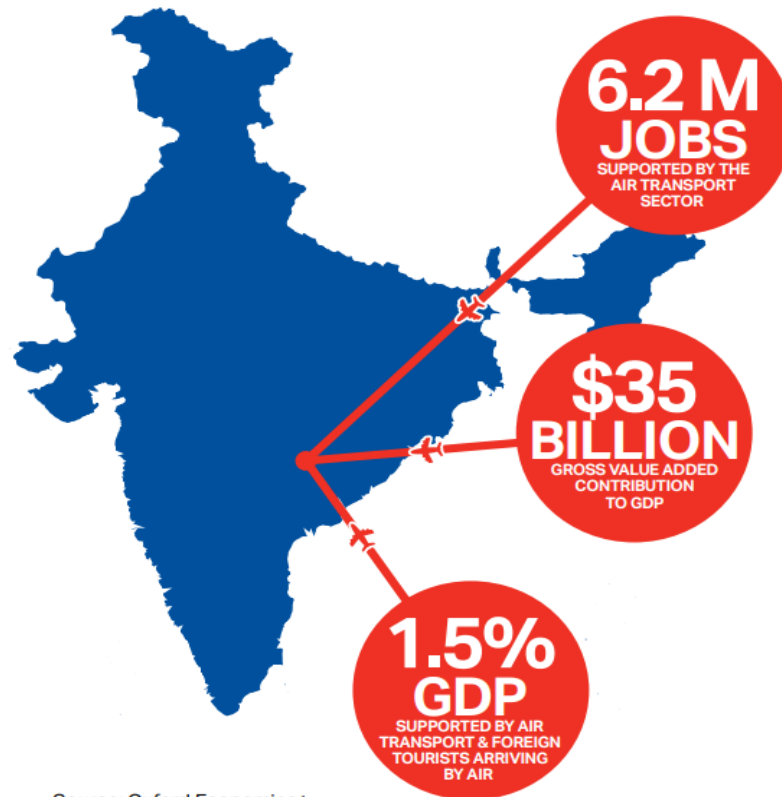


Fig: 5.1

In the financial year 2020, 3.33 million metric tonnes of freight were handled at Indian airports. International freight made up the majority of this. During the period of pandemic nearly half of the country's aviation freight was handled by three main airports: Indira Gandhi International Airport in Delhi, Chhatrapati Shivaji International Airport in Mumbai, and Kempegowda International Airport in Bengaluru.

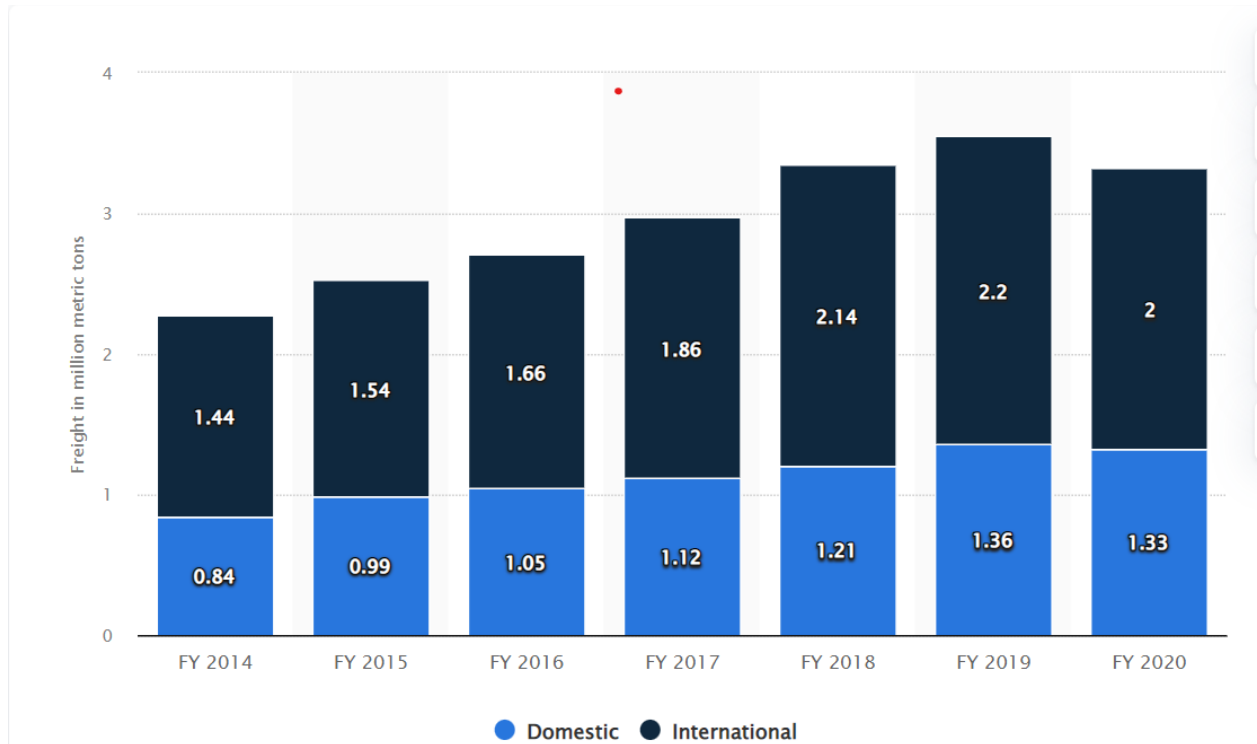


Fig: 5.2

Source: Statista

Prior to the coronavirus epidemic, India's commercial aviation sector saw remarkable growth. Its market saw double-digit growth on a regular basis. Despite the bankruptcy of Jet Airways, one of India's leading airlines, in 2019, passenger air travel in India grew at an excellent 12 percent compound annual growth rate between 2009 and 2019. In between the market issue the air freight has withstand and maintained the counterpart being faced on passenger traffic. Domestic air freight demand, recovered more quickly during the epidemic. Demands from the pharmaceutical and e-commerce industries pushed it forward.

As above graph depicts the growth rate of the air cargo shows significantly in the recent years as it's dropped down drastically now it's a time phase where the market to settle down and more demand for cargo brings more opportunities to grow in the air sector.

Below graph shows still that export is far greater than import that means a country exports more than imports then trade will be in surplus. A trade surplus might indicate a thriving economy since it indicates a good flow of cash from foreign businesses. Meanwhile, a country with a trade deficit is one that buys more than it exports.

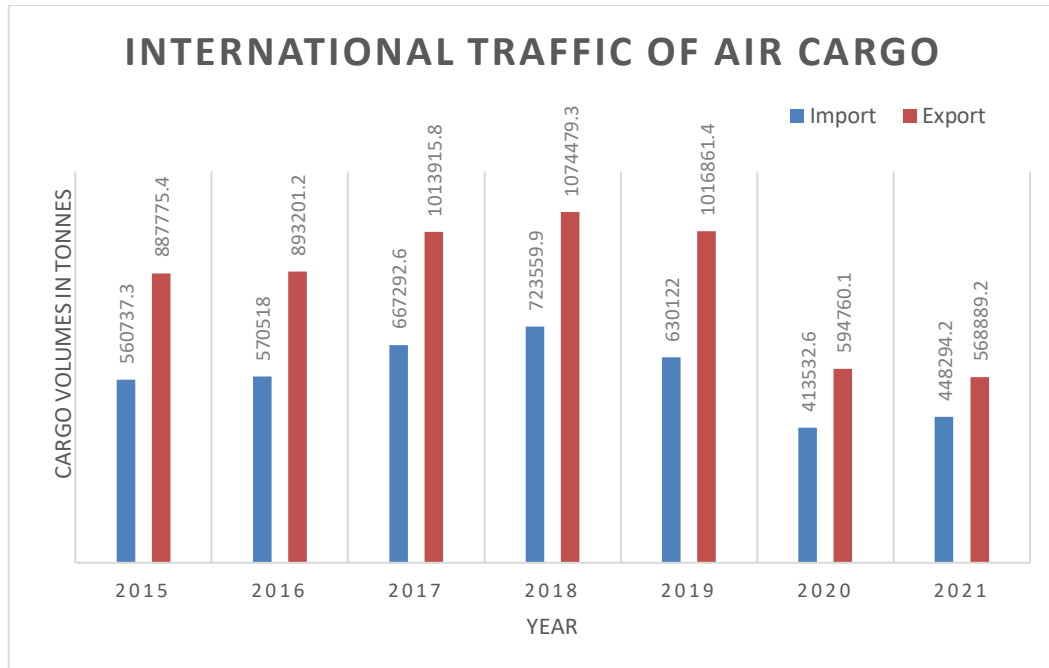


Fig: 5.3

The Compound Aggregate Growth Rate indicates that the number of growth on Export is dependent on an increase in e-commerce activity, increased freight capacity, improved airline connection to Tier-II/III cities, and freight yield competitiveness. However, given the anticipated fleet expansions, airline cargo capacity is growing at a quicker rate, with a CAGR of 13-15 percent in 2017. This will further tilt the market in favor of airlines. The fleet expansion elements reinstatement of Jet Airways with 30-40% (of fiscal 2019) potential in fiscal 2020 and a progressive increase over the next four years, although they were projected in the prior study analysis but sadly did not meet due to market disruption and Jet Airways' bankruptcy. Furthermore, dedicated freighters are expected to continue attracting players and traffic and growing at an organic rate, but route and freight dynamics can turn favorable for diligent freighters, the largest extension comes from the fact that route and freight dynamics demand their existence even though airlines' current cargo capacity utilization, at 70-80 percent, is sufficient to meet air cargo demand.

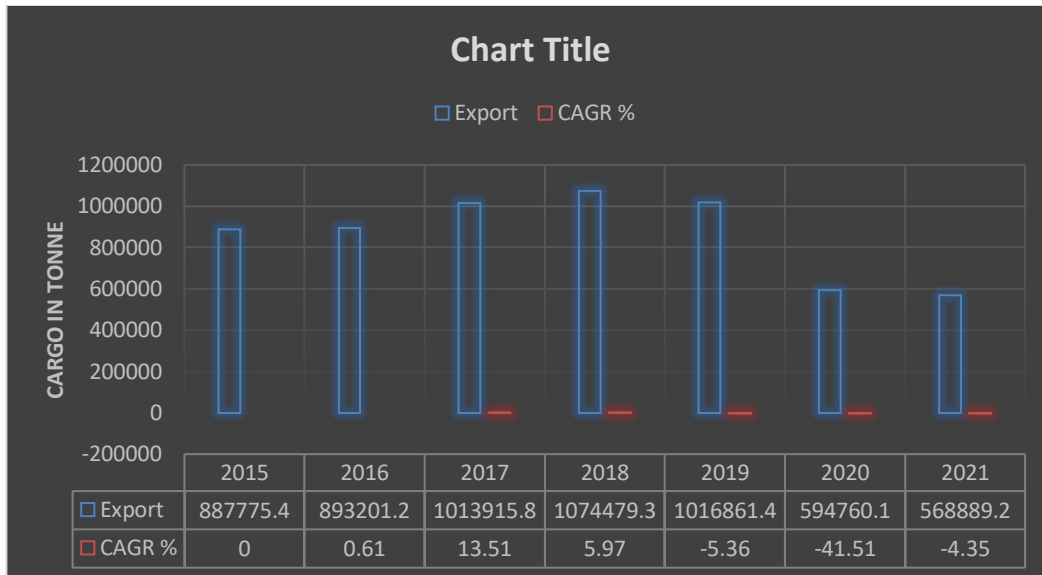


Fig: 5.4

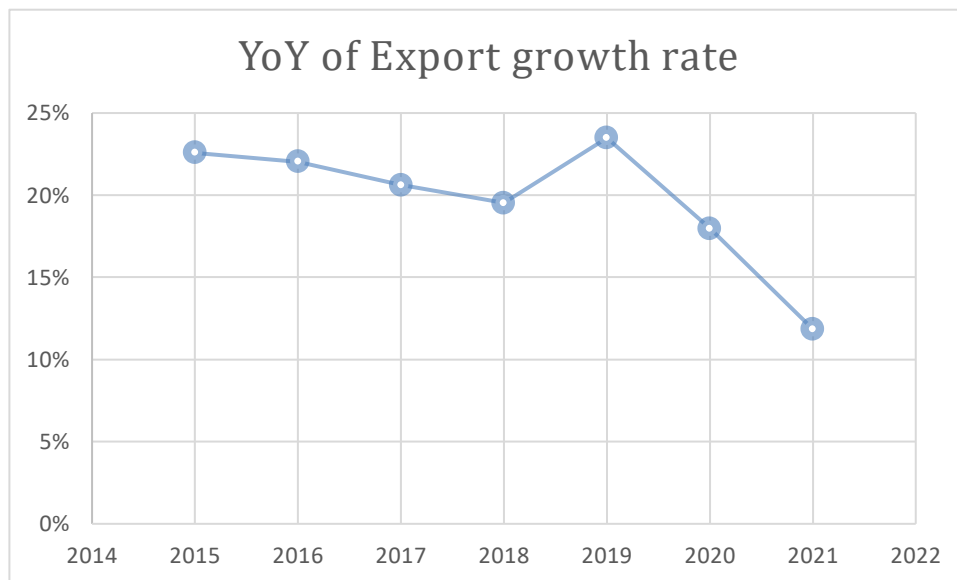


Fig: 5.5

Forecasting the rise of air freight Following the establishment of the link, the next stage is to anticipate air freight development, various forecasting methods have been there in that Trend Analysis is taken account for predicting the growth of cargo volume in India till 2026, an important step is the selection of appropriate forecasting method after considering the type of data pattern. The air freight sector is defined as revenues derived through air freight transportation, as seen in the graph below. As a result, unpredictable of market can cause the unsatisfactory report to be predict which make difficult decision to take likewise the air cargo and ocean cargo industry has gone through many up and down faces. In below graph the export rate has come `down as market required more focus on bulk cargo rather a short consignment, as we know the air freight which cost around the voyage 4\$/kg that much huge expenses but in sea rate is not in the half of those value.

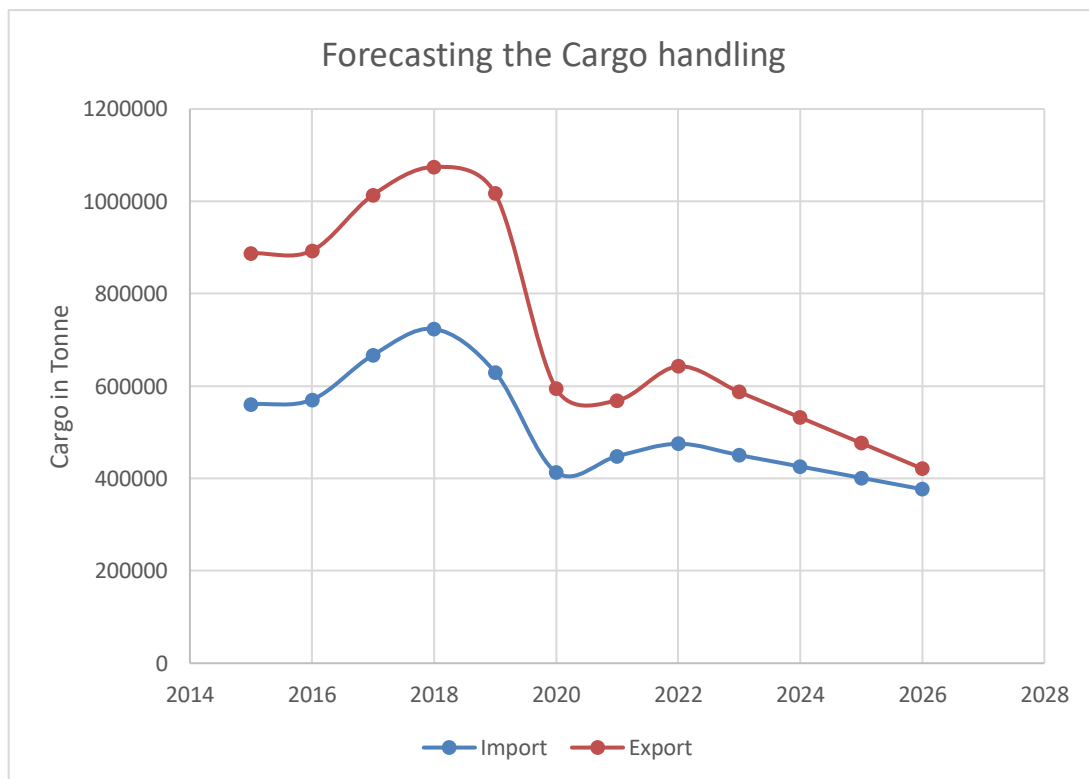
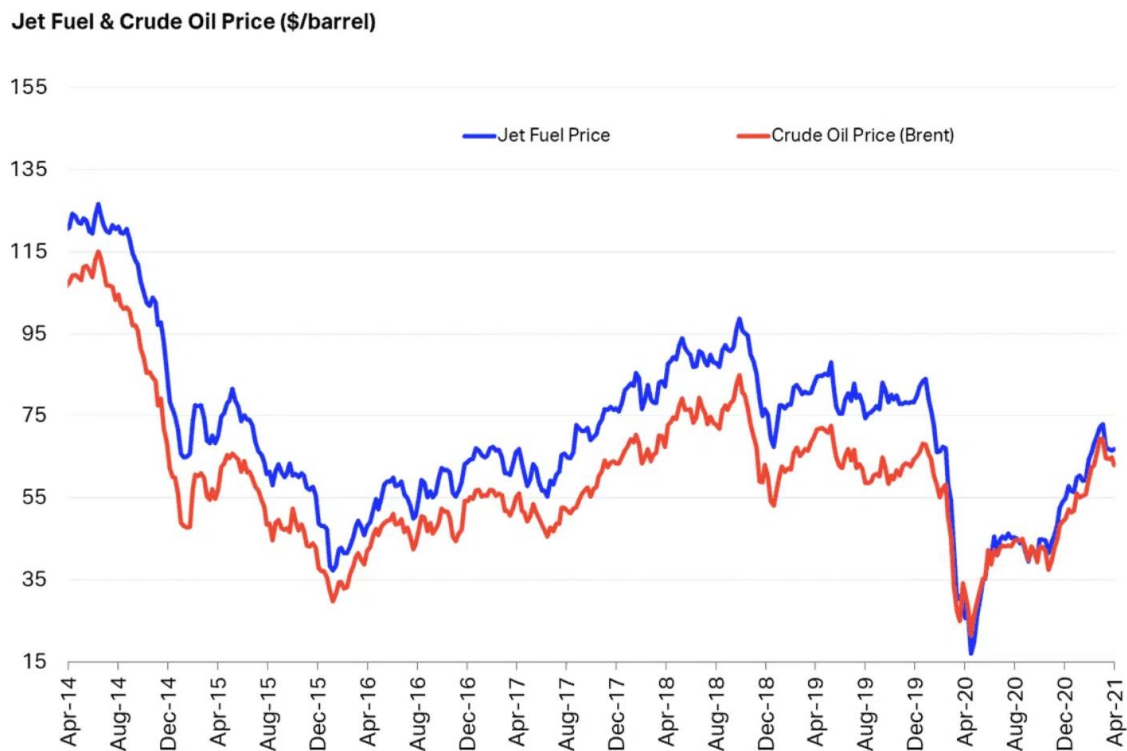


Fig: 5.6

That's a factor air cargo deceiving in the transport industry. Higher fuel prices will hinder airlines' ability to return to cash-positive operations, according to airline industry officials. Fuel accounts for roughly a quarter of operating costs. As a result of health concerns, customers

avoided travel, which led to an industry loss of \$118.5 billion last year. Airlines have borrowed heavily to remain in business because international traffic is almost 90% below pre-pandemic levels.

In addition to cargo owners, airlines that move goods are also affected by higher fuel prices. Several airlines have upped their fuel surcharges in the past 90 days and will have to assess how long they can continue operating repurposed passenger aircraft as dedicated cargo aircraft. This upward trend makes it slightly more challenging for airlines to run passenger aircraft with cargo because they aren't freighters. Using freighters to their full potential was not feasible, “The fuel prices were low, thus making it economically feasible, but that will be an economic challenge in the future.” Considering the cost of fuel for round-trip operations, it is driving the cost up. The airline industry struggles to earn money on passenger freighters at rates less than \$6 to \$7 per kilogram since the airline industry tends to be limited to one direction of revenue.



Source: Platts, Datastream

Fig: 5.7

CHAPTER V

SUMMARY OF CONCLUSIONS

Air cargo facilitates transporting goods much faster from one part of world to another and consequently initiates international business to grow and expand quickly than other mode of transportation. The Asia-Pacific region is the most important source of visitors to India, followed by the Middle East and Europe. 126 million passengers came in India from Asia-Pacific (85 percent of total), 13.1 million from the Middle East (8.9 percent of total), and 4.5 million from Europe (3 percent). Apart from all this study demonstrates the potential of Indian air cargo industry by analyzing the impact of major economic factors playing role in air cargo growth. Multiple linear regression analysis has shown in GDP therefore trades are having positive impact on the growth of air cargo whereas fuel price another significant factor showing negative relation. In this project the forecast air cargo demand of India has been generated with simple mathematical models rather than using sophisticated software or solution. However, there is always a good scope of using sophisticated algorithm, time series methods to predict future air cargo growth. Hence, these simple generalized forecasting methods discussed above can be used to predict air cargo demand of any country and eventually help them to make strategies to boost the predicted growth.

A study has termed the aviation industry the "real World Wide Web", adding that it contributes Rs 33,000 crore, or 0.5% of India's GDP, the creation of 1.7 million jobs, and the creation of critical infrastructure.

Oxford Economics conducted a study for International Air Transport Association (IATA) recently stating that aviation benefits the Indian economy and its citizens significantly and is one of the key assets upon which modern globalized businesses depend.

It said that the contribution of aviation to taxes and social security contributed by the sector is likely to increase, as it recovers from several difficult years that saw many firms lose money.

Another Rs 16,900 crore of tax revenue was raised indirectly or induced by the sector, according to a study of the sector's economic footprint in India.

Through direct output and indirect supply chain contributions, the sector contributed Rs 14,700 crore. A joint venture by the Oxford University and the leading economic forecasting consultancy, reported that tourism contributed an additional Rs 58,200 crore to overall contributions of Rs 91,200 crore, or 1.5% of GDP.

In its study of aviation, it found that it directly supported 276,000 jobs, indirectly supported 841,000 jobs through its supply chain, and directly created 605,000 jobs through employee spending. It also found that it indirectly supported employment of 7.1 million more people through catalytic effects, such as tourism.

India had a vast air transport network consisting of 357 routes connecting major Indian airports to metropolitan agglomerations throughout the world, referring to the aviation industry. A total of 66 of these routes connect India to cities with populations of more than 10 million people, with an average of seven flights per day available to passengers. It noted that frequencies were greater to the most economically significant destinations, including the internationally Delhi-Dubai connection and the domestic Delhi-Mumbai connection, both of which had an average of eight and 59 flights per day, respectively, helping customers greatly. It noted the earnings, revenues, and tax collections generated by Indian airlines "flow through the Indian economy, having multiplier effects on Indian national income or GDP," noting that they carried 71% of passengers and 78 % of freight. As we can investigate the figures that India can be in strong hold where lots of perishable goods which carry by India is huge. We know that Food sector of India, in the last decade or so, has attracted attention of the world owing to the tremendous potential the geography, climate and soil offer. Though, a leading producer of food in the world, it is not known for the exports of food products, so there is a huge potential in the market and set a remarkable in supply chain competition to the globally which is on a peak in many other sectors like pharmaceutical etc. world largest pharmaceutical market has in India with that we can set a market and become a world largest exporter in the medical section. There we need many reformations and build new infrastructure to withstand and compete in the global market.

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