

GROWTH OF RAILWAY INDUSTRY: AN ANALYSIS

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ABSTRACT

Service sector plays an important role in the share of GDP which is the base of economic development. It is a well documented observation in economic history that the share of services in national product tends to dominate once the economy reaches a certain stage of development (Fisher (1935, 1939), Clark (1957). Service sector contributes almost 58% in GDP. Defence, Public Administration, Insurance, Communications, Health, Hotels & Restaurants, Real estate, Trade etc all these services form a vital component of economy's infrastructure and railway is one of that component. Indian Railways is the backbone of long distance passenger transport in India with a network that spans more than 66030 km, making it the world's third largest rail network and the fourth largest rail freight carrier. This paper makes an attempt to provide an overview on the railway industry, its scenario, achievements, policies & initiatives taken by government for the growth of both economy and society. Indian Railways have undertaken various initiatives to provide encourage investment in railway infrastructure through investor-friendly policies and initiatives were taken for the customer to solve their grievances.

KEYWORDS: Infrastructure, Achievements, Policies & Initiatives, Customer Initiatives, Revenue Growth.

Introduction

Indian Railway- A Throwback

More than hundred years ago, a glorious red letter day appeared on 16 April 1853 in the history of Indian Railways, when the first train ran between Bombay to Thane covering 21 miles. With its more than 150 years old history Indian Railway is a state owned railway company, operated by the government of India through the Ministry of Railways. Indian Railway has always played a key role in socio-economic development of India performing the role of a national carrier of transporting passenger and goods over its vast network. As a carrier of bulk freight viz. ores and minerals, iron and steel, cement, mineral oils, food grains and fertilizers, containerized cargo etc., the importance of Indian Railways for agriculture, industry and the common man is well recognized. Indian Railways carried 22.2 million passengers and 3.03 million tonnes of freight each day during 2015-16. It is fourth largest railway network in the world comprising 119,630 kilometers (74,330 mi) of total track and 92,081 km (57,216 mi) of running track over a route of 66,687 km (41,437 mi) with 7,216 stations at the end of 2015-16. In 2015-16, IR carried 8.107 billion passengers annually or more than 22 million passengers a day and 1.101 billion tons of freight annually. Indian Railways is the world's eighth biggest employer and had 1.331 million employees at the end of 2015-16. It has 2.4 lakh wagons, 63,870 coaches and 9,549 locomotives. Indian Railways operates more than 19,000 trains daily. In addition, there are a number of Production Units, Training Establishments, Public Sector Enterprises and other Offices working under the control of Railway Board.

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In recent years, Indian Railways has undertaken several initiatives to upgrade its ageing infrastructure and enhance its quality of service. The Indian government plans to invest 9.05 trillion (US\$140 billion) to upgrade the railways by 2020. In collaboration with the Government of Japan, a high speed passenger corridor project between Ahmadabad to Mumbai has been undertaken, as per Railway Budget 2016-17. The construction of the project is likely to start in 2017. The government is also envisaging metro rail projects across many cities over the next ten years. Announcements have also been made for conducting a feasibility study for high-speed bullet train between Mumbai–Ahmadabad. With increasing participation expected from private players, both domestic and foreign, due to favorable policy measures, both passenger and freight traffic is expected to grow rapidly over the medium to long term. The Government of India has focused on investing on railway infrastructure by making investor-friendly policies. It has moved quickly to enable Foreign Direct Investment (FDI) in railways to improve infrastructure for freight and high-speed trains. At present, several domestic and foreign companies are also looking to invest in Indian rail projects.

Market size

The revenue generated by the Railways is expected to grow at 10 per cent in the next fiscal year 2017-18. The Union Budget 2017-18 estimated that the overall earnings will rise to Rs 189,498.37 crore (US\$ 28.42 billion) in 2017-18, compared to Rs 172,305 crores (US\$ 25.84 billion) in the current fiscal year 2016-17.

Infrastructure Development

Railway has started many projects with different companies for its infrastructure advancement:

- **Manufacturing Rolling Stock:** M/s GE Diesel Locomotive Pvt. Ltd. is setting up a Diesel Locomotive Factory (DLF) at Marhaura, Saran district, Bihar for manufacturing and supplying of 1000 high power Diesel Electric Locomotives over a period of 10 years. GE is also setting up a locomotive maintenance unit (one of two) at Roza (Shahjahanpur, UP) to service the locomotive factory coming up in Marhaura. M/s ALSTOM is setting up an Electric locomotive factory at Madhepura, Bihar for manufacture and supply of 800 high horse power (12,000HP) electric locomotives over 11 years. Land has already been provided to both these companies for setting up of the factories and preliminary work has started.
- **High Speed Rail Project:** On the Mumbai– Ahmadabad High Speed Rail Project India and Japan are collaborating using Shinkansen technology covering a total of 508 km. In February 2016 a new entity named National High Speed Rail Corporation Ltd was set up to implement the project. Japan International Cooperation Agency (JICA) has also appointed a General Consultant (GC).
- **Dedicated Freight Corridors:** On the Western route (Jawaharlal Nehru Port to Dadri) and other on the Eastern route (Ludhiana to Dankuni), two dedicated freight corridors have been fast-tracked. For the implementation these two corridors INR 25,320 crores worth of contracts have been awarded in the last two years. The first ever section on DFC of 56 km between Durgawati-Sasaram has been commissioned. Various New freight corridors which have been identified are-
 - East-West Corridor (2328 km) (Kolkata-Mumbai)
 - North-South Corridor (2343 km) (Delhi-Chennai)
 - East Coast Corridor (1114 km) (Kharagpur-Vijaywada)
- **Rail Wheel Plant:** At Bela near Chhapra a rail Wheel Plant has been commissioned and continuous production of cast wheels for rolling stock has commenced. The installed capacity of the plant is 1 lakh wheels per annum. A forged wheel factory has also been setup. at Raebareli by Rashtriya Ispat Nigam Limited.
- **DEMU Factory:** A factory (DEMU) at Haldia with a production capacity of 400 coaches per annum was commissioned in January 2015 and a Mid-life Rehabilitation Workshop with a capacity 250 coaches per annum at Jhansi was constructed in April 2015.
- **Electric Loco Assembly:** An Electric Loco Assembly & Ancillary Unit of Chittranjan Locomotive Works (CLW) at Dankuni in West Bengal was constructed & has been completed.
- **Traction Alternator Factory**
- Foundation stone has been laid for construction of Traction Alternator Factory at Vidisha to manufacture 100 traction alternators per annum of high horse power diesel locomotives, which was earlier being imported.

- **LHB Coach Manufacturing:** Modern LHB Coach manufacturing facility has been commissioned at ICF Chennai.
- **PPP in Railways:** An investment of INR 15,000 crore was generated through PPP projects during 2015- 16, which is highest till date. A partnership was encouraged between State Governments and industry is to undertake coal and mining connectivity projects in order to give momentum to PPP projects.
- **Major Investments & FDI Inflows:** The sector has witnessed USD 281.77 million FDI equity inflows during April 2014 to December 2016. The major investments in the sector have been in the manufacturing of railway wagons, coaches, mechanical & electro-mechanical signaling system, safety and traffic control systems. Details of some of the major FDI equity inflow are provided in the table as under:

Foreign Collaborator	Country	Indian Company	FDI Inflows (us \$ million)
ALSTOM Transport Holdings B.V	Netherland	ALSTOM Transport India Ltd	85.2
BOMBARDIER Transportation Holdings	Singapore	BOMBARDIER Transportation India Pvt. Ltd	39.5
ANSALDO STS Australia PTY LTD	Australia	ANSALDO STS Transportation Systems India	21.52
GE Capital International	Mauritius	TITAGARH WAGONS Ltd.	14.73
INVERSIONES EN Concessions	Spain	LAF India Pvt. Ltd	11.57

- **Development Projects of Railway Sector:** Foreign Direct Investment (FDI) inflows into Railways related components from April 2000 to December 2016 were US\$ 789.03 million. Following are some of the major investments and developments in India's railways sector:
 - For the projects Indian Railways plans to set up a US\$ 5 billion Railways of India Development Fund (RIDF) for investments.
 - For constructing up an electricity transmission network across the country with a strategy to reduce electricity bills, Indian Railways is to issue 6 tenders worth Rs 8000 crores.
 - Mr Nitin Gadkari, Minister for Road Transport and Highways and Shipping, has stated that for increasing connectivity of railway with Indian ports and to bring more eco friendly technology for scrapping of old vehicles, India will collaborate with Germany in a project of worth Rs 1 trillion.
 - Mr Suresh Prabhu, Railway Minister of India, aims at saving 41000 crores on Indian railway expenses on consumption of energy by doubling the electrification from 2000 km to 4000 km in next 2 years.
 - A new advertising policy has been started by Indian railways which aimed at installing big screen digital T.V on 20175 railway stations which is expected to generate Rs 11770 crores revenue by 2022.
 - A memorandum of understanding has signed by Indian Railway with ISRO for the development of new applications and services such as system to track trains on real time basis, technology of geospatial for mapping assets of railways.
 - Construction of six railway lines and a railway bridge incurring a total expenditure of Rs 10700 crores has approved by Cabinet Committee of Economic Affairs (CCEA) which will be useful to fulfill the needs of transportation of freight and passengers across the country.
 - The Madhya Pradesh Government has taken a loan of Rs 12000 crores from Japan International Co-operation Agency (JICA) for metro rail project between Bhopal and Indore.
 - Mr. Suresh Prabhu, in Railway Budget has mentioned to encourage private sector participation in railways by amalgamating public welfare with private investment.

Achievements

Recent Achievements of Indian railway are as follows:

- **First semi-high speed train-** Between Delhi's Hazrat Nizamuddin station and Agra Cantonment a Gatimaan express, was launched on April 5, 2016. It is the fastest train in India, running up to 160 km/h.
- **A high speed rail project** between Mumbai and Ahmadabad has been sanctioned at a total cost INR 97,636 crores.

An agreements worth INR 40,000 crores signed between Ministry of Railways and M/S Alstom Manufacturing India for the make in india initiative for setting up an Electric locomotive factory at Madhepura, and an another agreement with GE Global Sourcing India Pvt. Ltd for setting up a Diesel locomotive factory in Marhowra for rolling stock manufacturing (November 2015).

- 2828 km of Broad Gauge lines commissioned in FY 2015-16 which is highest ever & 1983 km of Broad Gauge lines in FY 2014-15 against an average of 1528 km during 2009-14.
- During 2014-16, 3105 RKM have been electrified, which is an average of 1552.5 RKM/annum as against 1236 RKM/annum during 2009-14.
- In FY15-16 1,098 RKM Optical Fibre Cables (OFC) have been laid. The total OFC network constructed by Indian Railways is 48,818 RKM OFC enabling high speed communication network over India.

Customer Initiatives

- To reduce day to day problems of major freight customers or stakeholders, key customer managers nominated for the better mechanism between industry and stakeholders.
- A process called "SAMVAD" is being initiated between customers and top railway authorities under which continuous feedback will be taken from customers. At all india level this program will be held quarterly and at zonal level it is bi-monthly.
- For public grievances, Indian railway has started using social media like twitter and sms to gather feedback and to ensure safety and wellbeing of passengers.

Revenue Growth

Strong Revenue Growth For Indian Railways:

- Revenue growth during FY07–16 increased at a CAGR of 6.4 per cent to US\$ 25.2 billion in FY16, and is estimated to expand at a CAGR of 9.07 per cent to US\$ 44.5 billion by the end of FY20.
- An expectation of increase in compound annual growth rate is 13.4% during FY 07-20.
- Freight and Passenger are the two components of maximum revenue generation for Indian railways. Revenues generated from commodity freight traffic are much higher than passenger earnings.
- Last 8 years record shows that freight and passenger segment has increase at a compound annual growth rate of 8.7% and 8.2% respectively.
- Indian Railway sector aims to boost passenger amenities.
- Indian Railway will touch the revenue of US\$ 44.5 billion by 2020, led by improvement in the economy and increasing industrial activity.

Road Ahead

- The Indian Railway industry is growing at a healthy rate. According to data's, In the next five years, the Indian railway market will be able to capture third largest position, accounting for 10% share in global market.

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