

## Foreign Direct Investment Towards Indian Infrastructure Sector and Its Impact on Growth and Development of India

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### **Abstract**

The main aim of this paper is to discuss how Foreign Direct Investment is helpful for the growth and development of the Indian Infrastructure sector. Indian Infrastructure industry would require \$1.7 trillion over the next ten years. Infrastructure financing in India has lagged well behind the country's economic growth. The growth of the secondary sector is being hampered by lack of infrastructure and its share of GDP is decreasing. As a result, the economy becomes over reliant on the service sector. The PPP model is used in many of the new Infrastructure projects. PPP initiatives are insufficient to address the country's immediate needs. According to the available data, India's FDI inflow has been steadily expanding. It has risen from \$4trillion in 2000-2001 to \$44trillion in 2015-16. With the increased demand for labor, goods and capital expenditure on infrastructure, there is a 2.5 to 3.5 rupees gain in GDP of the nation. Through FDI funds towards infrastructure sector, the country national highways have been expanding in a very significant way. Similar way railways, airports, seaports developing significantly in India.

*Keywords- FDI, Infrastructure, FDI policy, FEMA Act, FIPB, Airports, Seaports, Railways, Roadways.SLR method.*

### **Introduction**

Foreign Direct Investment (FDI) plays a crucial role in India's economic development by facilitating the infusion of capital into various sectors such as manufacturing, infrastructure, transportation, technology, productivity, and hospitality (Dr.S.Shalini, 2020). According to the committee on the compilation of FDI in India (October 2002) FDI is "The process whereby residents of one country (the home country) acquire

the ownership of assets to control the production, distribution and other activities of a firm in another country(the host country) .”

Before liberalization India followed restrictive trade practices but in the year 1991 the Finance minister Dr. Manmohan Singh under the supervision of Prime Minister P.V.Narasimha Rao took a courageous step to liberalize Indian market to private players as well as global investors by reducing the trade barriers and by allowing smooth flow FDI into the economy(Khusboo Goyal ,2019).

### **Review of Literature**

This paper will discuss the inflows of FDI towards infrastructure sector and how it enhances the growth and development of our country. To identify the problem the researcher used SLR (Systematic Literature Review) method. Here the researcher identified 25 articles various databases like Google scholar, semantic scholar, J- gate in which 15 articles screened, 10 were found eligible for final assessment and 6 articles were included after duplicates deletion.

### **Objectives of the Study**

The primary aspect of this research is to derive various aspects for better understanding of FDI towards Infrastructure sector and how it helps in growth and development of our country. The derived objectives are as follows:

1. To understand the Indian Infrastructure sector and FDI policy 1991.
2. To focus on FDI towards selected sectors of the Indian Infrastructure sector.
3. To analyze the impact of FDI towards four sectors namely Seaports, Airports Railways and Roadways.

### **Hypothesis**

H<sub>01</sub>: FDI inflows towards Infrastructure sector have a positive impact on growth and development of our country.

H<sub>02</sub>: FDI inflows towards Infrastructure sector have no positive impact on growth and development of our country.

### **Research Methodology**

The researcher for the sake of this paper has identified the topic Indian Infrastructure sector. The main aim of this paper is how much inflows India getting towards Infrastructure sector. In Indian Infrastructure sector, several segments are involved, but for the time and interest purpose researcher selected only 4 segments namely Railways, Airports, Seaports ad Roadways. The researcher uses exploratory study to find out the objectives. The data collected through secondary methods like websites, Government reports, blogs, etc. The collected data was analyzed with MS EXCEL.

### **FDI Policy in India (1991)**

In India after Economic Reforms, the FDI policy of 1991 is marked as a significant milestone in the country’s economic history by opening up the Indian economy to foreign investment.FDI regulations are governed by Foreign Exchange Management Act, 1999 (FEMA).In our country foreign investments are approved through automatic approval as well as government /FIPB approval. In automatic approval no prior approval by GOI or Reserve Bank of India (RBI) is needed whereas the Government Approval Route, formerly known as the Foreign Investment Promotion Board (FIPB) Route, requires foreign investors to

obtain prior approval from the government or the relevant ministry or department before making investments (Dr.Himanshu Talwar,2015).

**Table 1**

**FDI flows towards different sectors.**

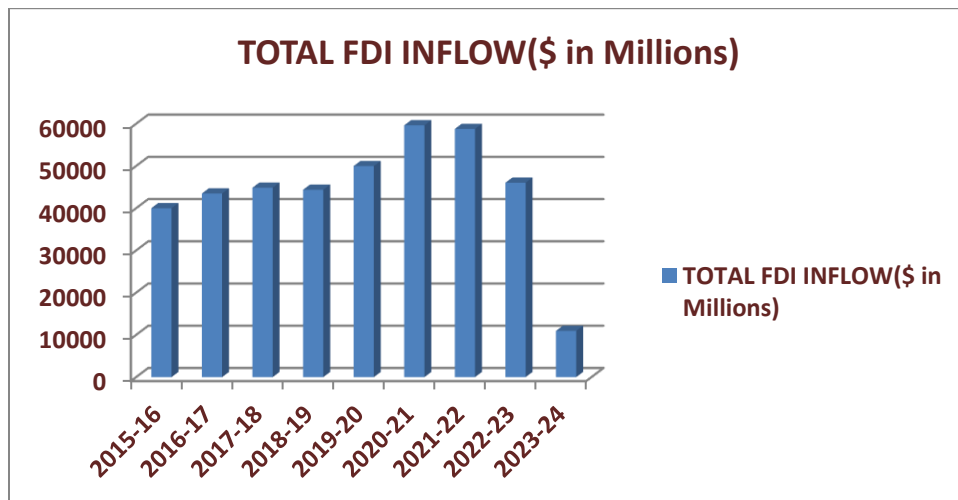
**Through FDI policy 2020, FDI flows towards different sectors are as follows,**

Sector	Percentage of Equity/ FDI Cap(%)	Entry route
Construction development: townships, housing, built-up infrastructure	100%	Automatic
AIRPORTS (non-scheduled and other services under civil aviation sector)	100%	Automatic
Scheduled air transport services, regional air transport services)	Upto 49%	Automatic
Railway Infrastructure	100%	Automatic
Ports & shipping	100%	Automatic
Roads & highways	100%	Automatic

Source: Invest India National Investment Promotion and facilitation Agency

Total FDI inflows in the country in the FY 22-23 is \$ 70.97 Million and total FDI equity inflows stands at \$ 46.03 Bn. The detailed share of FDI from different countries are as follows, Mauritius (26%), Singapore (23%), USA (9%), Netherland (7%) and Japan (6%) emerge as top 5 countries for FDI equity inflows into India FY 2022-23.

**FDI inflows for last four 10 years are as follows,**



**Figure1:**

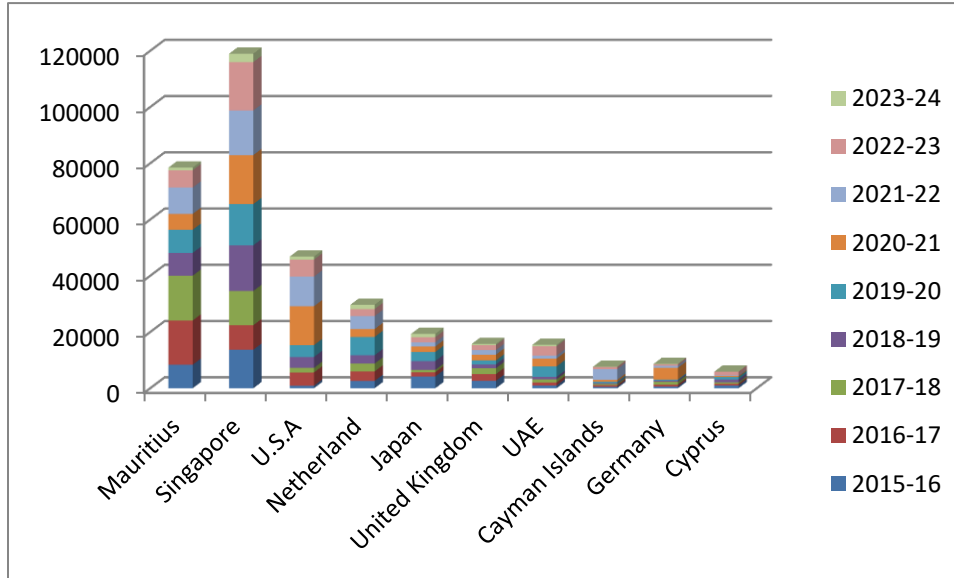
Total FDI inflows (\$ Million)

Source: Department for Promotion of Industry and Internal Trade (DPIIT)

Once you look at Figure 1, it has been representing the FDI flows towards Indian economy since 2015-16 to 2023-24. Except 2018-19, from 2015-16 financial year to 2018-19 flows are constantly increasing. Here we can see that 2020-21 shows highest FDI inflows to Indian economy and later on significantly decreasing due to corona pandemic situation.

In the year 2005 there were only 117 countries which provided foreign investment to our country and now there are 170 countries which are providing investments to our country through FDI.

**Share of top investing courtiers FDI equity inflow to our country since 10 years are as follows**



**Figure 2:**

FDI equity inflow from the last years

Source: Department for Promotion of Industry and Internal Trade(DPIIT)

From the above bar chart(Figure 2) we can see the top 10 countries through which our country is receiving FDI. Singapore is the country through which we get highest FDI inflows(\$151,159.5219 million) followed by Mauritius (\$164,833.5994 Million ) and USA(\$61,268.8715 Million).

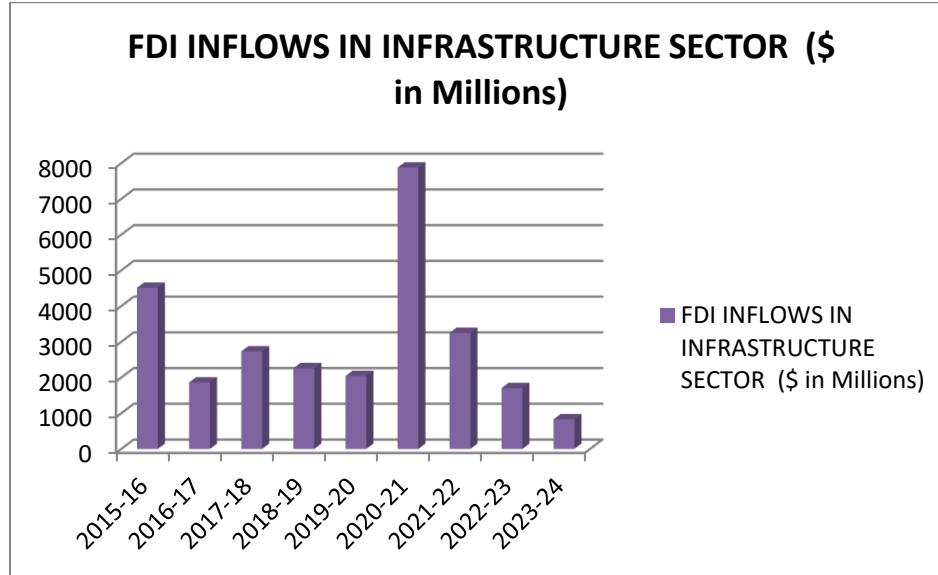
**FDI towards India Infrastructure**

Infrastructure is the backbone of our Indian Economy which plays a key role in overall development of our country. RBI defined Infrastructure sector as "(i) power, (ii) telecommunication, (iii) railways, (iv) roads including bridges, (v) sea port and airport, (vi) industrial parks, (vii) urban infrastructure (water supply, sanitation and sewage projects), (viii) mining, exploration and refining and (ix) cold storage or cold room facility, including for farm level pre-cooling, for preservation or storage of agricultural and allied produce, marine products and meat".

Under this sector, the researcher focused on four segments namely, Railways, Roadways, Sea ports and Airports. Until 1991 public sector was dominating private sector but India's infrastructure services are slowly but steadily moving away from the realm of government control to that of the private sector which gave rise to Public-Private Partnership. It helps to provide the government and local authorities an alternative method of funding and implementing various types of projects (Ananya Malik,2019). During

1990s decade, FDI in various sectors increased, and at present Foreign Direct Investment is allowed 100% in almost all the infrastructure sectors. Due to inflow of FDI there are various benefits like market access, technology transfer, and organizational skills etc. (Ayush Rastogi,2022).

FDI inflows to our country for last 10 years are as follows,



**Figure 3:**

FDI inflows In Infrastructure sector

Source: Department for Promotion of Industry and Internal Trade (DPIIT)

From the above figure 3 it is observed that in the financial year 2020-21 highest flows(\$ 7875 million) towards Infrastructure sector was received. Later there is a significant decrease in inflows due to corona pandemic.

### Sector-wise development (IBEF)

Although there are several sectors in Infrastructure, due to time constraint the researcher focused on four sectors namely are railways, roadways, airways and seaports.

### Railways

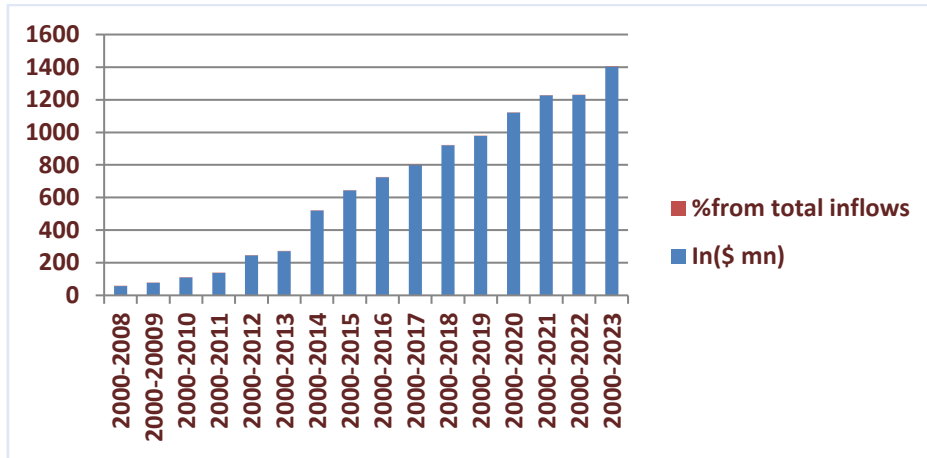
India has the fourth-largest railway system in the world, following the US, Russia, and China. Government has allowed 100% FDI in Railway sector. FDI inflows in railway-related components stood at US\$ 1.23 billion from April 2000-March 2023. From April to September 2023, a total freight loading of 758.20 million tons (MT) was obtained, compared to a loading of 736.68 MT the previous year, representing a rise of around 21.52 MT.

### Foreign Investors for railways are as follows:

Alstom Transport Holdings B.V. (Netherlands)
Bombardier (Singapore)
Ansaldo STS (Australia)
GE Capital International (Mauritius)
Inversiones EN Concesiones (Spain)

Source: Make in India

**FDI inflows for Railway sector is as follows,**



**Figure 4:**

Cumulative inflows of FDI towards Railway sector

Source: Department for Promotion of Industry and Internal Trade (DPIIT)

Once you look at Figure 4 it represents the cumulative inflows of FDI towards Railway sector from financial year 2000-2008 to financial year 2000-2023. FDI inflows are constantly increasing for railway sector but we can see a stagnancy position in 2000-2021 (\$1227.24 million) and 2000-2022 (\$1228.55 million) due to corona pandemic. Again in 2000-2023 (\$1402.09 million) FDI investments towards railway sector are constantly increasing.

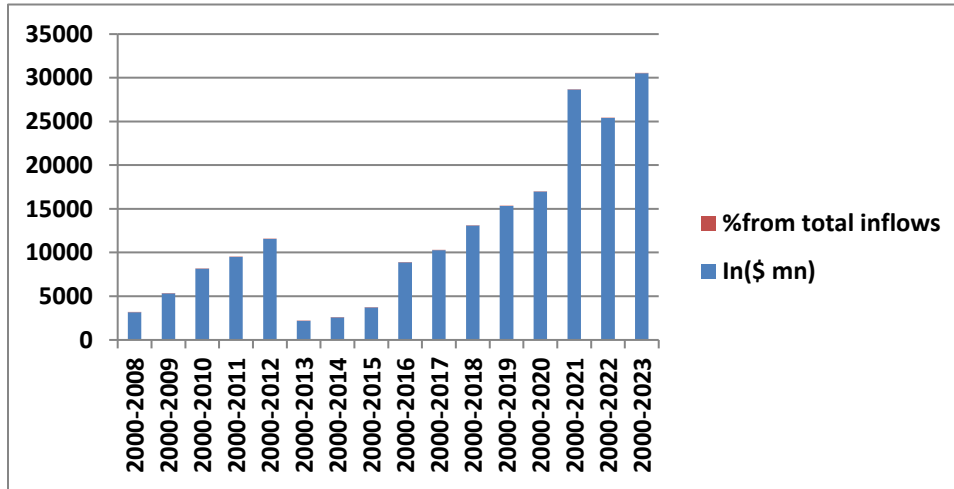
**Roadways**

As per the records 100% Foreign Direct Investment (FDI) is allowed under the automatic route in the road and highways sector. Foreign investors in roads and highways are as follows:

CIDBI Malaysia (Malaysia)
ERA-SIBMOST (Russia)
Essel Infra & CR-18 Consortium (China)
Gamuda Malaysia 0 WCT Malaysia (Malaysia)
GMR-Tuni-Ankapalli Express Ltd (Malaysia)
Hindustan Construction Company Ltd-Laing Sadbhav Consortium (UK).

Source: Make in India

FDI inflows for roadways (construction) sector for past years:



**Figure 5:**

cumulative FDI inflows towards Roadways

Source: Department for Promotion of Industry and Internal Trade(DPIIT)

Above Figure 5 represents the cumulative FDI inflows towards Roadways (construction) sector from the 2000-2008 to 2000-2023. From 2008 (\$3162.9 million) to 2012 (\$ 11552.52 million) FDI inflows constantly increasing but from 2013(\$ 2173.03 million) to 2015 (\$ 3703.3 million) there is a significant decrease in inflows of FDI due to global economic slowdown. Later from 2016(\$ 8886.97 million) to year 2021(\$ 28648.69 million) the flows FDI have constantly increased. Due to corona pandemic again there is decrease in FDI inflows in 2022(\$ 11552.52 million). Now the flows of FDI towards this sector are slowly increasing.

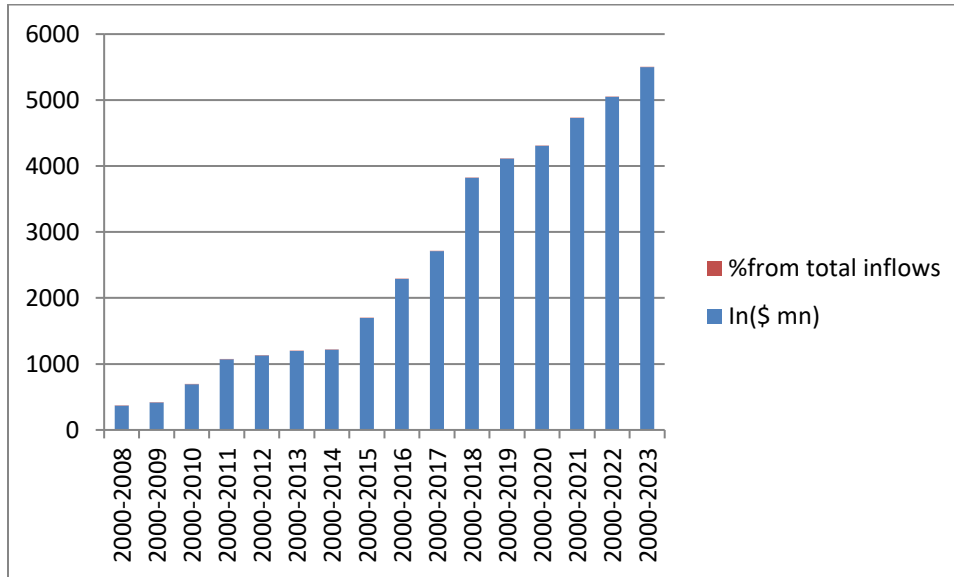
### Seaports

India has a coastline which is more than 7,516.6 km long, interspersed with more than 200 ports. Indian Government has allowed Foreign Direct Investment (FDI) of up to 100% under the automatic route for port and harbor construction and maintenance projects. Foreign Investors for ports and shipping are :

AP Moller Maersk (Denmark)
PSA Singapore (Singapore)
Dubai Ports World (UAE)
Hyundai Engineering and Construction Company Limited (South Korea)
Jan De Nul Group (Luxembourg)
Boskalis (Netherlands)
SAAB (Sweden)
Van Oord (Netherlands)
Wartsila (Finland)
P&O Ports (UAE)

Source: Department for Promotion of Industry and Internal Trade (DPIIT)

FDI inflows for seaport sector from past years:



**Figure 6:**

Cumulative inflows of FDI towards seaport

**Source: Department for Promotion of Industry and Internal Trade(DPIIT)**

Once you look at the above bar chart(Figure 6) it represents the cumulative inflows of FDI towards seaport sector from 2000-2008 to 2000-2023. here we can see that inflows towards this sector in 2012(\$ 1130.03 million) to 2014(\$ 1215.73 million) period is slow due to global economic slowdown and later on FDI inflows are constantly increasing.

### Aviation

With a market size of US\$ 16 billion, the country is the tenth-largest civilian aviation market. Foreign investment up to 49% is allowed under the automatic route.

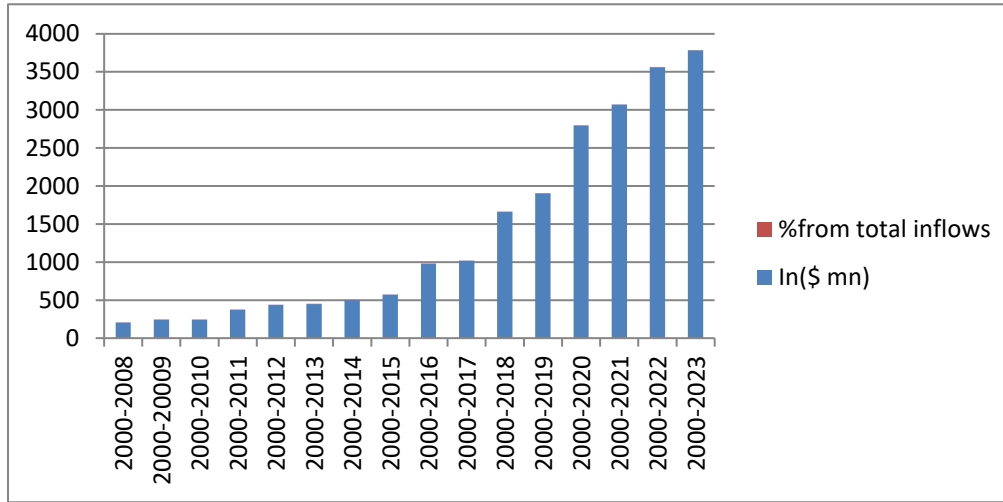
Foreign Investors for aviation sector are as follows:

Airbus (France)
Singapore Airlines (Singapore)
AirAsia (Malaysia) , Malaysia Airports Holdings Berhad (Malaysia)
Frankfurt Airport Services Worldwide (Germany)
Rolls Royce (UK)
Honeywell Aerospace (US), GE Aviation (US), Boeing International Corporation (US), Alcoa Fastening Systems Aerospace (US)
Etihad Airways (UAE)
Fairfax (London)
Airports Company South Africa Global (South Africa)

Source: Make in India



### FDI inflows towards aviation from past years,



**Figure 7:**

the cumulative inflows of FDI towards aviation sector

Source: Department for Promotion of Industry and Internal Trade(DPIIT)

From the above Figure 7 we can see the cumulative inflows of FDI towards aviation sector for Indian economy from 2000-2008 to 2000-2023. In this sector also there is slow increase in FDI inflows from 2012 (\$ 434.5 million) to 2014 (\$ 499.3 million) due to global economic slowdown. Later the inflows of FDI are constantly increasing.

### Summary And Conclusion

This study attempts to get an outlook of FDI towards Indian Infrastructure sector and its impact towards growth and development of our country. Indian Infrastructure includes many sectors but due to time constraints, only Four sectors were taken into consideration namely seaports, airports, roadways and railways. The research shows that there are fluctuations mainly in the years 2013-2015 due to global economic slowdown and in the years 2021-2022 due to corona pandemic. Again the inflow of FDI in these sectors is slowly increasing.

FDI policy is very helpful to Indian Economy because of liberalization through FDI abundant funds flow towards India. In terms of Ports, cargo capacity increased to 646.1 million tones, in aviation distance flown in FY23 was 969.63 million km, in railways the gross revenue increased to \$28.9 billion and in roadways total highway construction in India reached to 10993 km.

The researcher concludes that there is a positive impact of FDI inflows towards Infrastructure sector on the growth and development of our country. New technology and sophisticated machinery have been utilized for infrastructure sector. As a result projects were completed in stipulated time without delay and cost of the project also considerably decreasing through the foreign technology as well as FDI funds. However still today rural district road infrastructure point of view government not initiated any FDI policy for improving them. Researcher strongly recommend that rural district level infrastructure need to improve and same applicable to national highways, seaports, airports.

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