

Dedicated Freight corridor

January 12, 2021

Infrastructure is the backbone for economic development of any nation. Any hurdles in achieving safe and efficient freight transportation has to be overcome. In this regard Dedicated freight corridor plays a key role.

In news: Prime Minister Narendra Modi recently inaugurated a 306-km section of the Dedicated Freight Corridor (DFC) in the Western arm between Rewari and Madar.

Placing it in syllabus: Economy

Dimensions

1. What is the dedicated Freight corridor and need for it?
2. Modal share of freight in India
3. Efficiency gains and how is it a game changer
4. National rail plan

Content:

What is the Dedicated Freight corridor and need for it?

- Dedicated freight corridor (DFC) is an ambitious project approved in 2006, with the aim of decongesting the railway network by laying special tracks made exclusively for goods trains.
- The total 2,843-km project is billed as the largest rail infrastructure being built in independent India.
- **North-South (Delhi-Tamil Nadu), East-West (West Bengal-Maharashtra), East-South (West Bengal-Andhra Pradesh) and South-South (Tamil Nadu-Goa) DFCs** are being planned.
- Currently, the Western DFC (WDFC) connecting Haryana and Maharashtra and the Eastern DFC connecting Punjab and West Bengal are under construction.
- Around 70% of the freight trains currently running on

the Indian Railway network are slated to shift to the freight corridors, leaving the paths open for more passenger trains.

- Tracks on DFC are designed to carry heavier loads than most of Indian Railways.
- DFC will get track access charge from the parent Indian Railways, and also generate its own freight business.
- **World Bank** is funding a majority of the **Eastern DFC (EDFC)** and the **WDFC is being funded by the Japan International Cooperation Agency (JICA)**.

Need for it:

- Currently, freight trains do not get priority over passenger trains.
- Once completed, at least 70% of the freight trains will be transferred on the DFCCIL network which will help in timely movement of cargo.
- This may lead to the introduction of more passenger trains in future.
- With higher speeds and enhanced design features, these can help Railways provide a cheaper alternative to transport by road.
- E-commerce companies like Amazon and Flipkart will be able to transfer freight through railways once the dedicated freight corridor project is complete.
- The freight corridor project will also open up doors for the automobile sector (Private containers have to pay track usage charges).
- Foodgrain and fertilisers from the northern region will be transported to the eastern and Northeast regions.
- From East and Northeast, coal, iron ore, jute and petroleum products will be transported North and West.
- The agricultural produce will get a pan-India market because of cheaper and faster DFC connectivity.

Modal share of freight in India:

- Indian Railways hauled its **highest-ever freight load of 1,223 million tonne in fiscal 2019.**
- However, its modal share in transportation of surface freight was about 33 percent, marking a plunge from 85 percent over six decades.
- A strategic vision document prepared by the Indian railways has aimed for at least **50 percent modal share of freight traffic by 2030.**
- This would tantamount to **10-12 percent compound annual growth rate (CAGR) in freight traffic** over the next 10 years.
- The focus on DFCs can help railways move closer to the goal.
- The estimates suggest that once the western and eastern DFCs commence full-fledged operations, the **two parallel corridors (existing Railways track and DFC track) would capture 150-200 million tonne incremental traffic.**

As these two DFCs have the potential to substantially improve Railways' profitability, it would boost its internal accruals, which, along with funding from multi-lateral agencies, which can be used to achieve the target of commencement of three new freight corridors (Mumbai-Kolkata, Delhi-Chennai and East Coast) by 2030.

Efficiency gains and how is it a game changer:

- The project will **triple the movement of goods** (from approximately 25 kmph to 65-70 kmph).
- It **doubles the railways' freight capacity** (from 5,400 to 13,000 tonnes).
- It also **doubles the length of the trains** being used currently to up to 1,300 metres from the current 700 m, according to railways ministry officials.
- The DFC would reduce the high logistics cost in India, which averages from 13-15 percent of the product cost as

compared to the global average of 6 per cent.

National rail plan:

A long term strategic plan called the National Rail Plan has been developed to plan infrastructural capacity enhancement along with strategies to increase modal share of the Railways. The **National Rail Plan will be a common platform for all future infrastructural, business and financial planning of the Railways.**

The objective of the Plan is:

- To create capacity ahead of demand by 2030 and **increase the modal share of Railways from 27% currently to 45% in freight by 2030** as part of a national commitment to achieve Net Zero Carbon emission by 2030.
- **Forecast growth of traffic in both freight and passenger year on year up to 2030** and on a decadal basis up to 2050.
- **Formulate strategies based on both operational capacities and commercial policy initiatives** to increase modal share of the Railways in freight to 45% by 2030.
- **Reduce transit time of freight substantially** by increasing average speed of freight trains from present 22 Kmph to 50 Kmph.
- **Reduce overall cost of rail transportation** by nearly 30% and pass on the benefits to the customers.
- **Map the growth in demand on the Indian Railway route map** and simulate the capacity behaviour of the network in future.
- **Identify infrastructural bottlenecks** that would arise in future with growth in demand.
- **Select projects** along with appropriate technology in both track work, signalling and rolling stock to **mitigate these bottlenecks well in advance.**

As part of the National Rail Plan, **Vision 2024** has been

launched for accelerated implementation of certain critical projects by 2024 such as *100% electrification, multitracking of congested routes, upgradation of speed to 160 kmph on Delhi-Howrah and Delhi-Mumbai routes, upgradation of speed to 130kmph on all other Golden Quadrilateral-Golden Diagonal (GQ/GD) routes and elimination of all Level Crossings on all GQ/GD route.*

For successful implementation of the National Rail Plan ,the Railways will be looking to engage with Private Sector, PSUs, State Governments and Original Equipment Manufacturers(OEM)/Industries.

Mould your thought:

1. How does the Dedicated Freight Corridor (DFC) act as a game changer in achieving efficient freight transportation? Suggest measures to enhance infrastructural capacity to increase modal share of the Railways.

Approach to the answer:

- Write about DFC in brief.
- Write its importance (include its need as well as what it achieves if fully implemented).
- Write about the National Rail Plan as a measure
- Conclusion