

1. Evaluate the status of inland waterways in India. How can the untapped potential of waterways be exploited? What economic benefits would accrue with the expansion of waterways? Discuss.

Demand of the question – The answer needs to be divided into 3 parts where the status of inland waterways in India is to be evaluated in the 1st part while the next part should detail about the potential of waterways in India to be exploited. The final part should deal with the economic benefits of expansion of waterways.

Introduction

The inland water transport is a cheap, fuel-efficient, environment-friendly mode with a higher employment generation potential and is suitable for heavy and bulky goods. But, the share of inland water transport in total transport in India is only around 3.5 per cent.

Body

Status of inland water transport:

- The Government of India is working to develop inland waterways as an alternative mode of transport in the country, which is cleaner and cheaper than both road and rail transport.
- There are 111 National Waterways in the country today, after 106 waterways were declared as National Waterways, adding to the list of 5 existing NW, in 2016. Some of the National Waterways in the country are already operational/navigable and are being used for transportation. Some of these include Ganga system, Brahmaputra system, etc.
- The Inland Waterways Authority of India (IWAI) is working on developing the new National Waterways and enhancing their navigational potential. As per the feasibility reports completed so far, 36 NWs have been found to be technically viable. Out of these 36 NWs, developmental activities have been initiated on the following 8 NWs in 2017-18.

Exploiting the untapped potential:

1. RIS (River Information system) has been implemented in some places where RIS is a combination of tracking and meteorological equipment with specialized software designed to optimize traffic and transport processes in inland navigation.
2. Moving a step ahead towards ensuring optimum use of National Waterways, the Inland Waterways Authority of India (IWAI) also launched a portal LADIS – Least Available Depth Information System.
3. The Jal Marg Vikas Project (JMVP), for capacity augmentation of navigation on National Waterway-1 (NW-1), has also been approved.
4. New integrated systems are being developed wherein the waterway will form part of a larger multi-modal transport network having linkage with the Eastern Dedicated Rail Freight Corridor and also with the area's existing network of highways.

Economic benefits due to expansion of waterways:

1. A well-coordinated inland waterways network could bring a fundamental alteration in the logistics scenario of the country. It represents a ready built infrastructure network, which can be utilised without any further capital investment.
2. Waterways do not involve challenges associated with land acquisition, which has always been a sensitive issue, causing time and cost overruns of numerous projects. The significant investment which India needs to build its roads/highways infrastructure network can be conserved through increased utilisation of the waterways.
3. Waterways are a cheaper mode of transportation vis-à-vis the available alternatives, significantly reducing the point-to-point cost of goods transportation. As per a recent study of the Integrated National Waterways Transportation Grid, one litre of fuel will move 24 tons through one kilometre on road, 95 on rail and 215 kilometres on inland water transport.
4. Movement of goods and passengers through inland waterways would necessitate setting up large number of landing and loading/unloading points. This has the potential to open up large and accessible hinterland for supply of goods which can be transported at a lower cost.

Implementation of the national waterways network is, however, fraught with challenges like –

- The channel draft of the national waterways is not uniform at 2 meters throughout the year, as is required. Some of these rivers are seasonal and do not offer navigability through the year.
- Around 20 out of the 111 identified national waterways have reportedly been found unviable.
- Further, all the identified waterways require intensive capital and maintenance dredging, which could be resisted by the local community on environmental grounds, including displacement fears, thereby posing implementation challenges.

Way Forward/ Conclusion

- As every riverine system is unique and presents diverse challenges, separate studies based on a detailed micro-level review to assess viability need to be done for each, before taking up implementation.
- An effective waterways network would necessitate drawing up a well-coordinated strategy on lines of complementarity between the national network and other waterways, not declared as such, as well as between waterways and roadways/railways.
- The said strategy should closely look into the various undercurrents, including competing uses/needs, possible local resistance and also work closely and in coordination with local governments for quick and successful implementation of this important national project.

2. Do you support the idea of privatising the operations of railways? Substantiate your views with the help of suitable examples.

Demand of the question – Give your views with regards to privatising the operations of railways and also provide substantiation with suitable examples where you need to also give the other side of argument with proper substantiation.

Introduction

Recently, the Indian Railways initiated the process to allow private firms to operate passenger trains on its network through 151 new trains. While these trains will form a minuscule portion of the entire railway network, this marks the beginning of private sector participation in passenger train operations

Body

Supporting the idea of privatising the operations of railways, we can consider the following points:

1. The railways has said that 70 per cent of the private trains will be manufactured in India which will be designed for a maximum speed of 160 kmph. There would be a reduction in journey time by around 10-15 per cent at 130 kmph and around 30 per cent at 160 kmph. This will help in both Make in India initiative as well as efficiency of transportation.
2. The privatization will also help in accommodating the latest technology in railways coaches, safety and travelling experience. Thereby, it may help Indian Railways to become a world-class network.
3. Niti Aayog's strategy for New India @75 envisages many targets in railway infrastructure such as increasing the speed of infrastructure creation from the present 7 km/day to 19 km/day, 100% electrification of broad gauge track by 2022-23. Privatisation will help in this goal.
4. The private sector's success will depend critically on track operations and station access granted by the Railways. This will likely lead to insistence on clear operating procedures, responsibility allocation and high penalties for non-performance by the Railways.
5. Track access charges will be the key to viability of operations. The Railways will need to transparently allocate its capital and operating costs for various activities to enable a clear determination of components of network costs. The process of transparent cost allocation will help highlight hidden inefficiencies, which can be addressed in the form of separate projects undertaken by the Railways.

When the railways are viewed as the transport of masses, privatisation becomes even trickier. It lends credence to views against privatising the operations of railways, which are discussed below:

1. Increasing passenger trains will adversely affect freight trains where the latter actually accounts for 67% of Indian Railways' earnings. Many experts opine that freight trains will get impacted as the country has

limited lines on which we will see a higher number of trains running after this.

2. Given that a private enterprise runs on profit, thus it may be assumed that the easiest way of accruing profits in Indian Railways would be to hike fares. This would render the service out of reach for lower income groups.
3. An advantage of Indian Railways being government- owned is that it provides nation-wide connectivity to bring regional development. This would not be possible with privatisation since routes which are less popular may be neglected, thus having a negative impact on connectivity. For example, regions with rugged terrain and low population density like Himalayan states and North eastern states can be rendered inaccessible.
4. Currently, the Ministry of Railways is effectively the policy maker, regulator and service provider. This, as the Bibek Debroy committee pointed out, is a clear conflict of interest and would undermine the fair competition between private and government railway operations and impede the efficient privatisation process of Indian Railways.
5. Private companies are unpredictable in their dealings and do not share their governance secrets with the world at large. In such a scenario it would be difficult to pin the accountability on a particular entity, should there be a discrepancy.

Way Forward -

- Modernization of Railways- There is a need to implement the recommendations of the Bibek Debroy committee, such as expansion of Indian Railways manufacturing company, Corporatization of core functions of railways, etc.
- Sustainable Pricing- There is a need to revisit Indian Railways pricing model to make the passenger and freight segments sustainable. The tariffs should be competitive with the cost of road transportation.
- Independent Regulator- Setting up an independent regulator will be critical for creating a level playing field for private players. In this pursuit, there is a need to expedite the process of establishing the Rail Development Authority, as it is already approved by the government.

Conclusion

With the success story of privatisation in the aviation industry to refer to, it may be wise to focus more on robustness of privatization in the world's 4th largest rail network in the world by size to avoid pitfalls of other countries privatisation measures and instead ensure a world class transportation network for citizens of India.

3. Airport modernisation has gained much momentum in the last few years. Why is it important to expand and upgrade the airport networks? Explain.

Demand of the question – Detail the airport modernisation momentum gained in the last few years and also explain in the next part how it is important to expand and upgrade the airport networks in India.

Introduction

India's civil aviation industry aims to become the third-largest aviation market by 2020 and the largest by 2030 where it is planning development of more than 50 new airports and expansion of existing airports, giving job opportunities to millions.

Body

- India registered a growth of 14 percent in civil aviation sector during the last decade. With foreign direct investment (FDI) in air transport during the last decade touched the mark of \$570 million.
- The Country continues to be a favourite destination for foreign investors in civil aviation sector. It has been noted that the Indian civil aviation market is growing at a rapid pace and now ranks third in the world.
- Currently, six international airports have been completed successfully under PPP mode. The sector is expected to witness investments worth US\$ 25 billion by 2027.
- In November 2018, the Government of India approved a proposal to manage six AAI airports under public private partnership (PPP). These airports are situated in Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru.

Importance of expanding and upgrading the airport networks in India:

1. Airports being nuclei of economic activity assume a significant role in the national economy. The quality of airport infrastructure, which is a vital component of the overall transportation network, contributes directly to a country's international competitiveness and the flow of foreign investment. While cargo carried by air in India weighs less than 1% of the total cargo exported, it accounts for 35% of the total value of exports.
2. Better cargo handling facilities lead to enhanced levels of importation, especially of capital goods and high-value items. Likewise, 97% of the country's foreign tourists arrive by air and tourism is the nation's second largest foreign exchange earner.
3. Airports also represent a country's window on the world. Passengers form their first impressions about a nation from the state of its airports. They can be effectively used as symbols of national pride, if we pay sufficient attention to their quality and maintenance.
4. In many remote, hilly and inaccessible areas of the country, air transport is the quickest and sometimes the only mode of travel available. This is especially true of sensitive regions on the borders with our neighbours in

the west, north and north-east. Airports need to be integrated with other modes of transport like Railways and Highways, enabling seamless transportation to all parts of the country.

5. With the increase in traffic for both passenger & cargo aviation services in India, the government has put in place a program for directing investments in the Airport infrastructure – through both internal resource mobilization, as well as through private sector participation in modernizing specific Airports.
6. Air transport serves a time-sensitive market. The surface access to airports should, therefore, be efficient and city planners should keep the airport-linked requirements constantly in view while designing surface transport development plans. There is a special need to emphasise the aspect of rail links with airports, in view of its near absence in India as contrasted with other countries.
7. Aviation infrastructure also plays a key role in enabling the economic growth of countries that rely on major hubs such as Singapore and Dubai. In Dubai, for instance, aviation generates about 28% of the city's GDP.
8. Better transport linkages enable investment and human capital to flow more freely across borders, improving returns on investment for some projects.

Conclusion

In our journey towards the New India where the Indian economy is all set to scale new heights, the upgradation and modernisation of airport infrastructure and its efficient use have assumed critical importance. Thus, aviation, far from being a mere mode of transportation for an elite group, is crucial for sustainable development of trade and tourism.