

1. What are the challenges faced by India's civil aviation sector? Do a causal analysis.

Approach-

Candidates need to write about the Indian civil aviation sector and its significance also highlight the challenges of civil aviation in India.

Introduction

The civil aviation industry in India has emerged as one of the fastest growing industries in the country during the last three years. India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger market by 2024.

Body

Significance of aviation sector in India

- **Contributes to GDP:** The Aviation sector in India currently contributes \$72 bn to GDP
- **Job creation:** Indian aviation sector to employ 4 million by 2035.
- **Allied Sector Growth:** Before COVID-19, Maintenance, Repair & Overhaul (MRO) industry was forecasted to grow at an expected 5 year CAGR of close to 10% by 2023
- **Regional Connectivity:** It boosts connectivity to smaller cities and north-eastern states.

Challenges of Indian Aviation Sector

- **Infrastructure deficit:** unavailability of land to expand airports at their current sites, particularly in major cities
- **High Fuel Costs:** Fuel cost as a percentage of operating charges amounts to 45% in India as compared to the global average of 30 per cent.
- **Procedural Complexities:** Taxes and approvals by both Central and States governments increases the transaction costs of the aviation sector
- **Inadequate Human Resource Capabilities:** Shortage and gaps in the availability of industry-recognised skills – from airline pilots and crew to maintenance and ground handling personnel – constrains the growth of different segments of the sector.
- **Weak MRO sector:** 90% of the Indian MRO work is outsourced to countries like Singapore, Dubai, UAE, Sri Lanka and others.

Conclusion

India needs relaxation in some harsh regulatory measures and liberalisation policy for exit of an airline. With more private sector investment, tier II and tier III cities will also see new infrastructure development as envisaged in civil aviation policy of 2016.



2. Examine the key factors that have contributed to India's coal crisis? Suggest a roadmap to address this crisis.

Approach

Students are expected to write about the recent coal crisis in India with highlighting the factors responsible for it and then suggest some measures.

Introduction

According to International Energy Agency (IEA), coal-generated power plant account for around 70 percent of India's electricity generation. As eighty percent of India's 135 coal-powered plants had less than 8 days of supplies left more than half of those had stocks worth two days or fewer.

Body

Considering the limited reserve potentiality of petroleum & natural gas, eco Conservation restriction on hydel project and geo-political perception of nuclear Power, coal will continue to occupy centre-stage of India's energy scenario we need to study the challenges associated with coal sector:

- Recent crisis due to excessive rainfall, international price rise, Covid-19 pandemic, less production, transportation issues including freight rates and high consumption were the reason for the coal shortage.
- In the first eight months of 2021, India's power demand rose by 13.2 percent after a decline for the first time in over three decades in 2020.
- Being the world's third largest coal importer, India's imported supplies have shrunk by an unprecedented 44 percent
- In era of rising competition from the renewable energy and fossil fuel related climate politics thermal power plants posses the challenges of commercialization of coal stock and reserves.
- Default in payments by power plants or generating companies to Coal India forced the miner to go slow on deliveries to those with large outstanding.
- The coal sector has low productivity. The use of unscientific mining methods is a major contributor.
- The delay in clearance for mining coal impedes the realisation of the reserves' actual potential.
- The sector requires high operational and maintenance cost.

Measures:

- Entrance of private players in the sector will improve the coal quality and supply.
- Coal gasification is one of the technology that can be potentially used. It is the conversion of coal into syngas which can be used for power generation.
- Government support for the early resolution in land acquisition-related issues is needed to ensure timely operationalisation of coal mines.
- Improving the productivity of the sector is lucrative only in the short term. There is an inescapable need to understand the fact that it is a major contributor to climate change and our economy must gradually shift to renewables.

Conclusion

There is a need to encourage development and deploy technologies which involve extraction, transportation and burning of the black gold in the most efficient and environment friendly manner. R&D is necessary for improving the sector's efficiency. Simultaneously, training and awareness programs are needed for information dissemination.



3. What are the challenges of infrastructure financing in India? Do you think the current investment models are effective in addressing those? Critically comment.

Approach-

Candidates need to write about the challenges of infrastructure financing in India. Also, the candidate needs to critically think about the current effectiveness of investment models in addressing those challenges.

Introduction

Infrastructure development involves huge investments, procedural delays and returns spread over a long period of time. These unique features of infrastructure development raise some issues which are specific to the financing of infrastructure. As a result, mobilising and structuring financing for infrastructure development is a complex proposition.

The Challenges of Infrastructure Financing in India

- India has infrastructure challenges. Poverty and density may make these issues more pronounced than in many other countries, but the underlying question is always the same.
- The corporate bond market is still a long way to go in providing adequate financing to the infrastructure sector in India.
- Issues relating to land acquisition and environmental clearances add uncertainty which affects the risk appetite of investors as well as banks.
- Infrastructure is an economic enabler, not a panacea. It is the sum of many physical interdependencies that make up the essential services that a government provides.
- These services do not create an economy; they facilitate one. Infrastructure needs to make people more efficient so that they can be more productive with their time.
- Almost half of the total investment in the infrastructure sector is done by the Government through budget allocations. But Government funds have competing demands, such as, education, health, employment generation, among others.
- Commercial banking sector's ability to extend long-term loans to the infrastructure sector is limited.

Current Investment Models Are Effective in Addressing the Challenges of Infrastructure Financing in India

- India's private sector also needs to change some of its practices, as aggressive bidding and inadequate liquidity drive construction contractors to excessively rely on loan financing.
- Construction margins are tight everywhere in the world, but contractors in markets with a healthy secondary market for infrastructure assets are able to recycle their capital quicker, as infrastructure funds and even institutional investors actively buy up operating assets.
- These markets take time to develop, but the Indian government can begin laying the foundation for such activity now with effective regulatory reform to create a more attractive market.
- Drawn-out dispute resolution and land-acquisition processes are other long-standing issues in India.
- Delayed environment clearances continue to stall projects despite the passing in 2013 of a Land Acquisition, Rehabilitation and Resettlement Act (LARR).
- After 2014, the government had its sights set on reforming LARR to remove public consent clauses and social impact assessment requirements if land is acquired for national security, defence, and rural and social infrastructure.
- Whatever reforms India settles on – a transparent, consistent and stable land-acquisition process is essential for a healthy infrastructure market.
- India has a young, well-educated and skilled workforce. In addition, the outsourcing of professional services to India from multinationals and companies based all over the world have brought global best practice to India, which can be exported at cost-effective rates.
- As India's young generation matures, the opportunity for Indian businesses to capitalize on this resource and push beyond India's borders has never been greater.

Conclusion

This is where India meets its fork in the road. In one direction is business as usual, where India feels and acts like a world in and of itself. The other direction leads to more global engagement. One path is safe – but incredibly congested. The other is bolder and more competitive – but also liberating as its infrastructure market accelerates to match the tenacity of India's economic potential.