

The Big Picture

Topic – Urban Mobility and Public Transport

Date – 07th Dec 2020

Topics covered from the syllabus:

- **GS-3:**
 - Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
 - Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Note:

- Following is the summary of 'The Big Picture' discussion, which was aired on RSTV.
- Host: Frank Rausan Pereira
- Panellists: Sudhir Krishna, Former Secretary to the Government of India; Anil Srivastava, NITI Aayog; Prof. P. K. Sarkar, Transport Planning Expert.
- Please note that some inputs have been given by our team in order to make the topic more relevant to UPSC.

Context:

- Inaugurating the construction of Agra metro rail project, the Prime Minister emphasized on the importance of the **National Infrastructure Pipeline project in enhancing the standard of life** for citizens of the country.
- He also touched upon the **multi-modal connectivity infrastructure master plan** which has been conceived to improve the way **freight transport** is undertaken in India.
- Another minister in the government has pointed to the **impact of COVID-19 on the behavioural shift** of people regarding urban mobility. Due to the social distancing norms imposed on the society to curb the spread of the virus, there is a **rise in the usage of personal transport** including bicycles, as well as an observable **decrease in the usage of public transport**.

National Infrastructure Pipeline Project: It is a project to **provide world-class infrastructure and enhance the standard of life** of the people.

- It is envisaged that NIP would entail **spending of almost Rs. 111 Crores in the next 5 years**.
- It will be having contributions from both the **Centre and the States**, along with investments from the **private sector**.

Multi-modal connectivity Infrastructure master plan: It is a step of the government of India in the direction of ensuring **seam-less connectivity** between multiple modes of transportation.

- The national master plan to provide multi-modal connectivity to various economic zones is currently under preparation.
- It will include **Roads, Railways, inland Shipping and Civil aviation** within its ambit.
- It will boost **productivity, infrastructure, economic progress and employment opportunities** for youth.

State of Urban Mobility in India:

- **Rapid Urbanisation:** The urban population in India is expected to increase from 32% in 2011 to almost 40% in the next census, due in 2021. This means that the population of cities would swell to about 50 to 70 Crores, along with a commensurate **increase in the density of the cities**. Apart from this, cities are the **centre of economic activity**, which translates to a higher requirement for mobility. Thus, there is a need to implement faster connectivity solutions to be prepared for the foreseeable future.
- **Dependency on personal transport:** The **poor state of bus services and under-construction metro projects** in most cities means people have to rely on personal transport, even if their preference is public transport. This takes a toll on the available infrastructure, resulting in **traffic congestion on busy intersections** and major roads.
- **Evolution of novel commutation methods:** Strong **start-up ecosystem** in some advanced cities like Bengaluru has also lead to availability of innovative modes of transport like shared cabs, shared two wheelers, public bicycles, bike taxis etc., which are **convenient, affordable and can be chosen based on the suitability** and the needs of an individual.
 - Recently, there has been a discussion (initiated by the Finance minister's remarks on the younger generation's preference for cab services) on the **lesser preference of ownership** of the vehicles. Rather it is increasingly observed that the high skilled population, being increasingly mobile, is much more reliant on rental or taxi services.
 - Shared mobility is fast becoming the norm, with many mobile applications exploring **carpool** as an option to save costs and fuel, while also leading to lesser congestion on the roads.
- **Focus on environment-friendly (create a link here) transport solutions:** There is a rising awareness to safeguard the environment. Combined with the government's nudge in this direction, there is a renewed interest in electric vehicles. Also, various **schemes like the national electric mobility mission plan and carbon tax** also encourage usage of electric vehicles instead of fossil-fuel based transport.
- **Work from Home:** Covid-19 has shifted the preference of industry to work from home. Combined with **high rental costs** in the major cities and **round the clock availability of the workforce** under work from home paradigm, businesses have increasingly implemented work from home culture in their routines. This can be expected to curtail at least some traffic and lead to lesser congestion in the cities.

National Electric Mobility Mission Plan: It includes a set of monetary and non-monetary incentives to **promote electric vehicles** in the country.

- The objectives of NEMPP include **saving fuel costs and enhancing fuel security, apart from decreasing pollution**.
- The plan was expected to achieve **sales of hybrid and electric vehicles** to the tune of 60-70 lakhs by 2020. However, the impact of the plan has been limited.

Challenges in the sector:

- **Deficient public transport:** The state of public transport in India is deplorable. **India has hardly 12-13 buses per lakh population.** This number should be around 100 per lakh, for adequate movement of the people. Apart from that, the **condition of buses** in India is unacceptable, which leads to a predilection in the favour of private transport.
- **Infrastructure deficit:** The **lack of good quality, all-weather roads and infrequent maintenance** means that increasing the number of buses is not viable as it would only intensify the congestion in the cities.
- **Impact of COVID:** Mass transit systems like Metro rail have suffered from a scornful attitude since the arrival of COVID. There is a penchant for personal transport as it is believed that the congestion in public transport can be a factor in the **spread of corona-virus.**
- **Lack of Safety:** India has one of the highest fatality rate related to road accidents globally. It accounts for **about 5 lakh road accidents annually, in which 1.5 lakh people die and another 3 lakh become crippled.**
 - Major factors for this include **scant regard for safety and poor road design.** There is a need for better enforcement of laws and better engineering of roads to enhance road safety in India.
- **Lower Allocation to Transport infrastructure:** Major cities in India have dedicated hardly 6-10% (barring Delhi, which has allocated almost 20% to transport infrastructure) of their total land **allocation to the construction of transport infrastructure,** which has led to inadequate transport infrastructure in the cities with reference to the population and its requirements.
- **Charging Infrastructure for Electric Mobility:** To boost the chances of faster expansion of electric vehicles, there is a need for establishing charging infrastructure at frequent intervals of travel. This would counter the current **impairment of battery technology** and reassure future buyers.
- **Socio economic Conditions:** It is imperative to designing the urban mobility system with an eye on socio-economic conditions prevalent in the society, as the present state of society would **require inexpensive modes of travel,** rather than making huge investments in expensive, unviable projects. For e.g., many experts have pointed out to the need for more metro rail projects rather than investing the same amount in bullet trains.

Way Forward:

- **Role of government:** The government needs to **incentivise the popularity of electric and other non-polluting modes of transport,** apart from **encouraging the usage of public transport** among the people. This would lead to enhanced savings for the government in terms of **lower infrastructure costs, lesser trauma spending and savings on fuel imports.**
 - Global partnerships have to be encouraged in the direction of coordination on better transport solutions. For e.g. India organised the **global mobility summit in 2018,** which guided the industry in the direction of enhanced future relevance.
- **Change in mind-set:** Currently, there is a bias against the usage of non-motorised transport and public transport, as it is not only uncomfortable, but also **considered as an inferior mode of transport,** unsuitable for affluent sections of the society. **Government functionaries must take the lead** in demonstrating the efficacy of using public transport and making it the preferable mode of transport.

- **Integration of public transport with non-motorised transport solutions:** Augmentation of **feeder bus services and construction of safe walk-ways to ensure last-mile connectivity** for the people is the need of the hour. In India, non-motorised transport consists of almost 40-45% of total transport. Similarly, the **average trip size in India is also relatively less**, reflecting the importance of non-motorised transport.
- **Unified Payment system:** There is a need to integrate the ticketing system of different transport systems into a **comprehensive solution**, so that it is easier for people to interchange and use public transport effectively. For e.g. Kochi metro not only made it easier for the people to pay for metro services by integrating the metro card with the credit card, but also earned handsome revenue in the process.
- **Disabled-friendly transport:** The transport system needs to be made **more accessible to the vulnerable sections** of society. This is also in consonance with the stated objective of the government to enhance accessibility of public transport for the specially-abled people and create additional opportunities to integrate them into the mainstream.
- **Policy Changes:** Keeping in mind the **increasing traffic, congestion and lack of parking spaces** in the country, there is a need for innovation in the policy-making process. For e.g. it is difficult for a family to have more than one car in Singapore. Such policies are also required in India.
- **Increasing the relevance of metro station:** Experts have pointed out that the expansion of metro stations into hubs of economic activity by constructing shopping malls, office complexes, gymnasiums, sports complexes etc. within the premises of the metro station would increase the chances of people using the public transport.
- **Encouraging entrepreneurship and private sector-led investment:** It is important to cede space to the private sector, as it is more focussed on innovation. Government needs to **guide the private sector and provide opportunities for more public-private partnerships, to leverage investments** in public transport.

Conclusion:

- The need of the hour is to ensure a **comprehensive, integrated urban mobility solution** which should incorporate **last mile connectivity** within the major modes of transport.
- Also, enhancing the ease of travel through a **unified payment system** for seamless multi-modal travel, suitable to socio-economic conditions of the society would be highly appreciated.
- Apart from that, ensuring the safety of roads through **better road design** would be required to improve the fatality record related to road accidents in India.

Practice question:

- Analyse the importance of hybrid vehicles in achieving India's commitment to environmental preservation and enhancing last mile connectivity.

UPSC Previous Year Question:

- National Urban Transport Policy emphasizes on moving people instead of moving vehicles. Discuss critically the success of various strategies of the government in this regard. (GS3 – 2014)

Related link:

- India's steps to enhance environmental protection – (India's renewable energy plan – 28 nov RSTV discussion) - 2nd page of this doc