Performance Assessment of Highways

Part of: GS-III- Economy (PT-MAINS-PERSONALITY TEST)

Recently, the National Highways Authority of India (NHAI) has decided to undertake performance assessment and ranking of the highways in the country. The assessment activity majorly intended to improve the quality of roads in the country.

Parameters for Assessment:

- The criteria for the assessment have been broadly categorised in three main heads namely, Highway Efficiency (45%), Highway Safety (35%) and User Services (20%).
- Additionally, important parameters like operating speed, time taken at toll plaza, road signages, road markings, accident rate, illumination, availability of Advanced Traffic Management System (ATMS), functionality of structures, cleanliness, plantation, wayside amenities and customer satisfaction will also be considered while conducting the assessment.
- Apart from overall ranking of all the corridors, separate ranking for Build-Operate-Transfer (BOT), Hybrid Annuity Model (HAM) and Engineering, Procurement, and Construction (EPC) projects will also be done.

- **BOT** is a conventional PPP model in which a private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector.
- In the case of **HAM**, the central government bears 40% of the project cost and the remaining amount is arranged by the developer.
- Under the **EPC model**, the cost is completely borne by the government. The ranking of the corridors will be dynamic and the operators will get the opportunity to improve upon their ranking by improving the services on that corridor.

Significance:

- The score obtained by each Corridor in each of the parameters will provide feedback and corrective recourse for higher standards of operation, better safety and user experience to improve existing highways.
- It will also help in identifying and filling gaps of design, standards, practices, guidelines and contract agreements for other NHAI projects.
- The ranking for BOT, HAM and EPC projects is expected to bring out operational efficiency and ensure high quality maintenance of roads.
On the basis of outcome of the assessment, the authority will undertake a comprehensive analysis and decide on the level of intervention required to enhance the overall service quality.

National Highway Authority of India

- National Highways Authority of India (NHAI) was set up under NHAI Act, 1988.
- It is under the administrative control of the Ministry of Road Transport and Highways.
- It has been entrusted with the National Highways Development Project, along with other minor projects for development, maintenance and management. National Highways Development Project (NHDP) is a project to upgrade, rehabilitate and widen major highways in India to a higher standard. The project was started in 1998.
- NHAI maintains the National Highways network to global standards and cost effective manner and promotes economic well being and quality of life of the people.

PT-SHOT

National Highways Development Programme (NHDP) was launched in 1998 with the objective of developing roads of international standards which facilitate smooth flow of traffic. It envisages creation of roads with enhanced safety features, better riding surface, grade separator and other salient features. National Highways constitute only 2% of the total road length in the country but carry 40% of the total traffic.

NHDP is being implemented by National Highways Authority of India (NHAI), an organisation under the aegis of Ministry of Road, Transport and Highways. The programme is being implemented in the following seven phases:

- **Phase I:** Phase I consists of Golden Quadrilateral network comprising a total length of 5,846 km which connects the four major cities of Delhi, Chennai, Mumbai & Kolkata and 981 km of North-South and East-West corridor. NS-EW corridor connects Srinagar in the north to Kanyakumari in the south and Silchar in the east to Porbandar in the west. Phase I also includes improving connectivity to ports.
- **Phase II:** Phase II covers 6,161 km of the NS-EW corridor (The total NS-EW corridor consists of 7,142 km) and 486 km of other NHs.
- **Phase III:** Four-laning of 12,109 km of high density national highways connecting state capitals and places of economic, commercial and tourist importance.
- **Phase IV:** Upgradation of 20,000 km of single-lane roads to two-lane
standards with paved shoulders.

- **Phase V**: Six-laning of 6,500 km of four-laned highways.
- **Phase VI**: Construction of 1,000 km of expressways connecting major commercial and industrial townships.
- **Phase VII**: Construction of ring roads, by-passes, underpasses, flyovers, etc. comprising 700 km of road network.