

## General Studies-3; Topic: Infrastructure; roads, transport

### Golden Quadrilateral Project

#### 1) Introduction

- In 1999, then prime minister Atal Bihari Vajpayee laid the foundation stone for the Golden Quadrilateral (GQ) Highway project.
- The Golden Quadrilateral is the longest road project in India and the fifth-longest highway in the world
- It connects four major cities: Delhi, Mumbai, Chennai and Kolkata.
- The GQ project is managed by the National Highways Authority of India (NHAI) under the Ministry of Road, Transport and Highways.
- The Golden Quadrilateral constitutes only the national highways of the country and not state highways and rural-urban roadways.

#### 2) Benefits for the country

- Provides faster transport networks between major cities and ports
- Provides connectivity to major agricultural, industrial, and cultural centres of India
- Provides smoother movement of goods and people within the country
- Enables industrial development and job creation in smaller towns through access to varied markets
- Farmers are able to transport their produce to major cities and towns for sale and export, and there is less wastage and spoils.
- More economic growth through construction and indirect demand for steel, cement, and other construction materials
- Giving an impetus to Truck transport throughout India.
- Reduced wastage for the agriculture sector, and a decrease in vehicle operating costs and time.

#### 3) Impact of Road Infrastructure Development

- An efficient road network is essential for a large country like India to maintain national integration and socio-economic development.
- It promotes rapid industrialization through cheaper and more efficient movement of goods, people, and ideas across places.
- Road infrastructure affects the flexibility and mobility of the workforce
- Rapid urbanization and demographic changes in India call for an acceleration of investment in road infrastructure.

#### 4) Impact of Golden Quadrilateral

- Provided a huge boost to manufacturing activity and productivity in districts located within 10km of the network.
- Facilitated the movement of growing young firms out of the congested big cities
- 49% overall output increase for the average district located on the Golden Quadrilateral network.
- Encouraged efficient decentralization by making intermediate cities more attractive to manufacturing entrants.
- Moderate-density districts—like Surat in Gujarat or Srikakulam in Andhra Pradesh—that border Golden Quadrilateral registered more than 100% increase in new output.
- Industries showed improved efficiency

- Golden Quadrilateral has added to GDP, created efficiencies in transportation, provided jobs and improved rural development through enhanced connectivity.

### 5) **Challenges**

- Tight fiscal space and broader issues of governance, doing business, climate change and competition policy have made it more challenging for infrastructure investments
- Districts near to the north-south and east-west (NS-EW) highway did not experience any change in activity.
- India has one of the lowest average speeds for trucks which adds to fuel consumption costs and transportation delays.

### 6) **Importance of Roads**

- Transportation of goods and passengers for short and medium distances.
- Establishes easy contact between farms, fields, factories and markets and provides door to door service.
- Roads are a necessary complement to railways.
- Roads are highly significant for the defence of the country. Border roads facilitate the movement of troops for the protection of borders.

