Module - 3
Infrastructure: Importance and Application
Brief Outline

- Importance of Infrastructure
- Applications of Infrastructure Economics
- Infrastructure and Public Policy
Importance of Infrastructure

- According to World Bank (2015), infrastructure helps determine the success of manufacturing and agricultural activities.
- Investments in water, sanitation, energy, housing, and transport improve lives and help reduce poverty.
- New information and communication technologies promote growth, improve delivery of health and other services, expand the reach of education, and support social and cultural advances.
- Thus, infrastructure is not the end result of economic activities; rather it is the framework that makes economic activity possible.
Benefits of the Study of Infrastructure Economics

- Link between economic growth and development
- Understanding the role of Infrastructure in Production of goods and services
- Getting the idea of how cost-efficient services is being produced with the help of Infrastructure
- Helps in evaluating the benefits of growth through infra projects
- Exploring the promotional role of Infrastructure in trade and commerce
- Attracting foreign capital (FDI and FII)
- Regional economic integration
Growth and Development through Infrastructure

- Infrastructure economics attempts to study the infrastructure is supporting certain principles of economics
- Rodan Model: Big Push-large minimum investments are needed in industrial and infrastructure sector to overcome the obstacles to development and attains the high growth path
- **Social Overhead Capital** - examples of social overhead capital include railways, roads, sanitation, schools, hospitals, and public parks
- Underdeveloped transportation infrastructure results in slow and uncertain delivery of goods and services, hinders economic growth and distribution
- The economic growth and success of US, Singapore, South Korea, Taiwan can be attributed to investments in social infrastructure such as education and health
Production and Infrastructure

- Infrastructure supports the production of goods and services by providing basic structures and facilities.
- The well developed transport networks reduces the cost of bringing the raw materials and other critical inputs to the manufacturing units.
- The power or electricity is crucial for production units and augments to the production of goods and services.
- Investment in education and health creates human capital that provides labor for the industry.
- Telecommunications augment in marketing and provides information about the markets.
- Cost-efficient - producing a good or service at the lowest cost.
Foreign capital and Infrastructure

- Infrastructure is critical in attracting foreign capital
- USD 8 trillion of infrastructure investments are required in Asia between 2010-2020
- The infrastructure investment gap is huge in Asia, Sub-Saharan Africa, and Latin America
- Countries having better infrastructure attracts more foreign investments
Trade Commerce and Infrastructure

- Trade is regarded as engine of growth. Sound and adequate infrastructure is, however, needed for sustained growth of exports.
- Well developed and adequate infrastructure is essential for promotion and facilitation of production, bring down the cost of production, limit the transaction costs and make exports competitive globally.
- According to the 2013 Mercer’s Cost of Living Index and Savills’ Live-Work Report, Singapore continues to be cost competitive compared with other major financial centres because of well developed infrastructure facilities.
Infrastructure and Regional Economic Integration

- There are forward and backward linkages of infrastructure development and regional economic integration.
- Regional integration can take the form of either free trade area, customs union, common market, economic union or monetary union - the institutional framework is provided by the adequate and proper infrastructure.
- By encouraging regional integration countries are better-off in trade, share resources and build mutually beneficial infrastructure.
- Integrated markets with regional integration and efficient infrastructure helps in attracting investments, and provides quality goods and services at competitive prices.
- For instance: Japan will provide USD 35 billions to India for Infrastructure development in next 5 years.
Applications of Infrastructure Economics

- Urban Finance
- Business Economics
- Civil Engineering
- Local Bodies
- Public Policy
- Urban and Rural Management
- Community Development etc.
Infrastructure and Public Policy

- Public policy plays critical role in Infrastructure development

- **Public Policy**- The policies proclaimed by the government such as regulatory measures, funding priorities and other course of action. For instance: government might take the decision to build highways or canals or open a new university

- **Public Choice**- Economic analysis of the government decision making

- **Collective action**- The government may work under the influence of special interest groups that serve their own interest

- **Rent seeking**- when government approves a program that benefits only a small group within society but whole society pays the cost

- **Welfare State**- found particularly in more prosperous and democratic societies, distributes resources extensively to provide for the health, education, employment, housing, and income support of its citizens
THANK YOU