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**

development in next 5 years

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

## **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