

# INFRASTRUCTURE

**After studying this chapter, the learners will**

- understand the main challenges India faces in the areas of social and economic infrastructure
- know the role of infrastructure in economic development
- understand the role of energy as a critical component of infrastructure
- understand the problems and prospects of the energy and health sectors
- understand the health infrastructure of India.

*"Many things we need can wait, the child cannot. To him, we cannot say, 'tomorrow'. His name is today."*

*Gabriella Mistral—Chilean poet*

**So is the Infrastructure.**

## 8.1 INTRODUCTION

Have you ever thought of why some states in India are performing much better than others in certain areas? Why do Punjab, Haryana and Himachal Pradesh prosper in agriculture and horticulture? Why are Maharashtra and Gujarat industrially more advanced than others? How come Kerala, popularly known as 'God's own country', has excelled in literacy, health care and sanitation and also attracts tourists in such large numbers? Why does Karnataka's information technology industry attracts world attention?

It is all because these states have better infrastructure in the areas they excel than other states of India. Some have better irrigation facilities. Others have better transportation facilities, or are located near ports which makes raw materials required for various

manufacturing industries easily accessible. Cities like Bengaluru in Karnataka attract many multinational companies because they provide world-class communication facilities. All these support structures, which facilitate development of a country, constitute its infrastructure. How then does infrastructure facilitate development?

## 8.2 WHAT IS INFRASTRUCTURE?

Infrastructure provides supporting services in the main areas of industrial and agricultural production, domestic and foreign trade and commerce. These services include roads, railways, ports, airports, dams, power stations, oil and gas pipelines, telecommunication facilities, the country's educational system including schools and colleges, health system including hospitals, sanitary system including clean drinking water facilities and the monetary system including banks, insurance and other financial institutions. Some of these facilities have a direct impact on production of goods and services while others give indirect support by building the social sector of the economy.



**Fig. 8.1** Roads are the missing link with growth




**Fig. 8.2** Schools: an important infrastructure for a nation

Some divide infrastructure into two categories — economic and social. Infrastructure associated with energy, transportation and communication are included in the former category whereas those related to education, health and housing are included in the latter.

speedy and large-scale transport of seeds, pesticides, fertilisers and the produce using modern roadways, railways and shipping facilities. In recent times, agriculture also depends on insurance and banking facilities because of its need to operate on a very large scale.

Infrastructure contributes to economic development of a country both by increasing the productivity of the factors of production and improving the quality of life of its people. Inadequate infrastructure can have multiple adverse effects on health. Improvements in water supply and sanitation have a large impact by reducing **morbidity** (meaning proneness to fall ill) from major waterborne diseases and reducing the severity of disease when it occurs. In addition to the obvious linkage between water and sanitation and health, the quality of transport and communication infrastructure can affect access to health care. Air pollution and safety hazards connected to transportation also affect morbidity, particularly in densely populated areas.

 **Work This Out**

➤ In your locality or neighbourhood you might be using a variety of infrastructure. List all of those. Your locality may also be requiring a few more. List those separately.

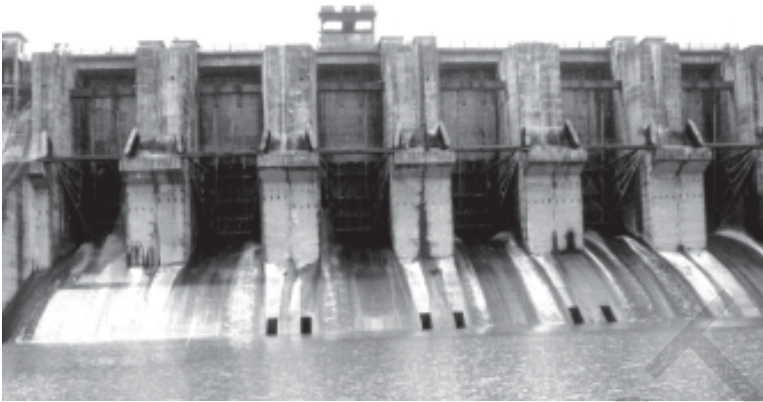
### 8.3 RELEVANCE OF INFRASTRUCTURE

Infrastructure is the support system on which depends the efficient working of a modern industrial economy. Modern agriculture also largely depends on it for

### 8.4 THE STATE OF INFRASTRUCTURE IN INDIA

Traditionally, the government has been solely responsible for developing the





**Fig. 8.3** Dams: temples of development

country's infrastructure. But it was found that the government's investment in infrastructure was inadequate. Today, the private sector by itself and also in joint partnership with the public sector, has started playing a very important role in infrastructure development.

A majority of our people live in rural areas. Despite so much technical progress in the world, rural women are still using bio-fuels such as crop residues, dung and fuel wood to meet their energy requirement. They walk long distances to fetch fuel, water and other basic needs. The census 2001 shows that in rural India only 56 per cent households have an electricity connection and 43

per cent still use kerosene. About 90 per cent of the rural households use bio-fuels for cooking. Tap water availability is limited to only 24 per cent rural households. About 76 per cent of the population drinks water from open

sources such as wells, tanks, ponds, lakes, rivers, canals, etc. Access to improved sanitation in rural areas was only 20 per cent.

Look at Table 8.1 which shows the state of some infrastructure in India in comparison to a few other countries. Though it is widely understood that infrastructure is the foundation of development, India is yet to wake up to the call. India invests only 5 per cent



**Fig. 8.4** Safe drinking water with pucca house: still a dream









































