

**NCERT Solutions for Class 11 Economics Chapter 8****1. Explain the term infrastructure.**

Infrastructure refers to the basic or core supporting system which helps an economy to function properly. The infrastructure consists of roads, communication, transport facilities, industries, bridges, dams, electricity, hospitals, and schools. These facilitate economic development by encouraging activities like investment and production.

**2. Explain the two categories into which infrastructure is divided. How are both interdependent?**

Infrastructure is broadly divided into two categories as follows:

1. **Economic Infrastructure:** Economic infrastructure consists of components that are helpful in production and distribution. The productivity of the economy is raised through the quality of resources and which serves as a support system for the growth of the economy. Some examples of economic infrastructure are communication, transportation, energy, and financial institutions. A developed economic infrastructure will pave the way for a better economy.
2. **Social Infrastructure:** Social infrastructure strives to enhance the quality of human capital. It includes hospitals, housing facilities, educational institutions and nursing homes. The presence of social infrastructure helps in improving human productivity which improves the standards of living.

Economic infrastructure and social infrastructure are complementary to each other. Economic infrastructure works for economic growth, while social infrastructure aims to enhance the quality of life. Both these have a positive effect on the prosperity of the nation.

**3. How do infrastructure facilities boost production?**

Infrastructure helps production in the following ways:

1. If agriculture has no irrigation facilities, it has to become dependent on monsoon rains which can cause less productivity and, as a result, less crop production.
2. Industrial production requires the use of technology, machinery and proper equipment for efficient production and transport services to deliver the final goods to market. Hence, a weak infrastructure without any such facilities will not be able to boost production.

**4. Infrastructure contributes to the economic development of a country. Do you agree? Explain.**

Definitely, infrastructure helps in the economic development of a country. It can be understood better in the following points:

1. Infrastructure, both in the form of economic and social, assist in increasing productivity, which leads to higher production. It ensures the smooth movement of goods and raw materials, which reduces inefficiencies and leads to effective resource management.
2. Having an appropriate infrastructure helps in providing an environment which is more likely to bag investment from potential investors. Lack of infrastructure does not encourage investment.
3. Infrastructure helps in economic development by offering linkages. These can be forward or backwards. Linkages help provide scope for expansion of one industry due to growth or expansion in a related industry.
4. Infrastructure helps in enhancing market size. The way raw materials can be transported in a fast and cost-effective manner will help a producer to offer goods in different markets across the country or borders.

**5. What is the state of rural infrastructure in India?**

Infrastructure in rural India is not as developed as in urban areas. Women in rural areas are still making use of wood and cow dung to fulfil their energy needs. As per Census 2001, 56% of households had access to electricity, while the remaining were using alternative sources like kerosene etc. In rural households, around 90% of the fuel used for cooking is biofuel. There is a lack of clean water, and sanitation is very less. Infrastructure being an important indicator of growth, it is essential to address this concern. India has invested a very meagre 5% of its GDP towards infrastructure, most of which should be towards rural infrastructure, which will promote the economic development of the rural areas as well as the country as a whole.

**6. What is the significance of energy? Differentiate between commercial and non-commercial sources of energy.**

Energy plays a significant role in the development process of a country. All the major industries, agriculture, transportation etc., are dependent on energy for their functioning.

Energy is the lifeline of industries and also for domestic use. It is used for cooking and lighting. So it has a very significant role in our life.

Commercial Energy	Non-commercial Energy
<ul style="list-style-type: none"><li>i. Energy sources available to users for a price is called commercial energy.</li><li>ii. For commercial purposes such as industries and agriculture, this type of energy is used</li><li>iii. Examples of commercial energy are coal, natural gas, petrol and electricity.</li></ul>	<ul style="list-style-type: none"><li>i. Energy sources available free to all users is called non-commercial energy</li><li>ii. Used for domestic purpose</li><li>iii. Examples of non-commercial energy are cow dung, firewood and agricultural waste.</li></ul>

**7. What are the three basic sources of generating power?**

Three basic sources of generating power are nuclear, hydroelectric and thermal. Nuclear power uses nuclear fission of elements like uranium and plutonium to generate electricity, while hydroelectric power produces electricity from the kinetic force of falling water. Thermal power uses the heat energy of coal, gas or oil to produce electricity.

**8. What do you mean by transmission and distribution losses? How can they be reduced?**

The loss of power that occurs in transmission between sources of supply and points of distribution is called power transmission and distribution losses. The following steps can be taken to reduce such losses:

1. Improved technology related to transmission and distribution should be used in rural areas.
2. The network for transmitting electricity should be privatised. It will lead to more efficiency and minimum wastage.
3. Cases of electricity theft by employees should be dealt with disciplinary action. Fines and penalties should be imposed on those carrying out such activities.

**9. What are the various non-commercial sources of energy?**

Energy sources that are freely available for all and do not have a market are referred to as non-commercial sources of energy. Such energy sources are used for domestic consumption. Examples are cow dung, firewood, and waste obtained from crops.

**10. Justify that the energy crisis can be overcome with the use of renewable sources of energy.**

Renewable sources of energy are those sources which can be replenished or renewed. These sources are available in nature, and examples are sunlight, wind energy etc. The non-renewable sources cannot renew themselves readily and will exhaust once their quota is finished, and hence cannot be an answer to the energy crisis that is being experienced. In such a situation, the natural sources which can be found in abundance should be utilised.

**11. How has the consumption pattern of energy changed over the years?**

The following points will show the changing consumption of power in India:

1. For converting the consumption of different fuels into a common unit, the term MTOE is used, which stands for Million Tonnes of Oil Equivalent.
2. Coal, petroleum and gas are the leading fuels that are in use in India. Coal is used in 55% of energy requirements, followed by oil and natural gas at 31 and 11 per cent. The use of hydroelectric energy accounts for 3%.
3. Over-dependency on petroleum products has resulted in the majority of oil being imported from the Gulf countries.
4. Atomic energy constitutes around 2% of the total energy consumption.
5. Agriculture is using more electricity than it was used earlier, and the industrial sector still has the highest spending on electricity among all sectors.

**12. How are the rates of consumption of energy and economic growth connected?**

Energy consumption is crucial for economic growth. Consuming renewable sources of energy leads to the sustainable development of the economy. Agriculture and other industries use electricity to drive the production and transportation of produced goods and services. A country having a good amount of energy consumption in industrial and other related sectors, such as

agriculture, clothing etc., will indicate good economic growth of a country. Using renewable sources of energy also leads to sustainable economic development.

### **13. What problems are being faced by the power sector in India?**

The following are the problems faced by the power sector in India:

1. Considering an annual growth of 7% for economic growth, the available capacity of the power stations is not sufficient to meet requirements.
2. There has been a loss of about 500 billion for the state-run electricity boards.
3. Power supply at subsidised rates to agriculture further compounded the losses.
4. High tariffs and frequent power cuts are some of the most important problems currently.
5. The electricity boards are unable to reduce transmission and distribution losses.
6. Scarcity of raw materials for thermal power plants is a hindrance to producing electricity.

### **14. Discuss the reforms which have been initiated recently to meet the energy crisis in India.**

The list of reforms is as follows:

1. Government has allowed the private sector to start generating electricity.
2. Indian Government had allowed a joint venture of Tata Power and Power Grid Corporation for the construction of transmission networks.
3. The mission of POWER for ALL by 2012 was one such initiative where the government planned to achieve a target of 1000 Kwhr per capita consumption. The aim was to improve the quality of power and the viability of power companies commercially.
4. CERC (The Central Electricity Regulatory Commission) and SERC (State Electricity Regulatory Commissions) are regulatory mechanisms that have been set up in states to regulate tariffs and improve efficiency and competition.

5. Accelerated Power Development and Reform Programme (APDRP) was introduced in the year 2000 with the aim of improving financial viability, bringing a reduction in T& D losses and introducing computers for checking functions.

6. Encouraging the population to use renewable sources and reduce dependence on conventional sources. National programmes like National Energy Efficiency Programme (NEEP) were established that aimed at conserving petroleum products.

**15. What are the main characteristics of the health of the people of our country?**

The following points show the state of health of the people of our country:

1. Death rate witnessed a decline to 8 per thousand
2. Infant mortality rate reduced to 7 per thousand
3. Life expectancy increased to 64 years
4. Many of the deadly diseases were under control, like smallpox, cholera, polio, leprosy etc.
5. Child mortality rate reduced to 23 per thousand

Health Indicators in India

Health Indicators	India
Infant Mortality Rate/1,000 live-births	68
Under-5 mortality/1,000 live-births	87
Birth by skilled attendants	43
Fully immunised	67
Health expenditure as % of GDP	1.4
Government health spending to 5 total government spending (%)	5
Per Capita spending in International Dollars	96

Source: World Health Record 2005 and Economic Survey 2007-08

**16. What is the global burden of disease?**

Global Burden of Disease (GBD) is a comprehensive global and regional research programme that assesses the number of people who are going to die prematurely due to a particular disease. It also includes the number of years spent on disability due to various diseases. India has a share of 20% of the overall GBD, and the majority of the diseases are malaria, tuberculosis and diarrhoea.

**17. Discuss the main drawbacks of our health care system.**

The main drawbacks of our healthcare system are as follows:

1. Healthcare services are not equally distributed in rural and urban areas. More population is in rural areas but has one-fifth of the hospitals and doctor population ratio is 1:2000. Half of the dispensaries are in villages. Healthcare facilities have been confined to urban areas mostly.
2. Diseases such as AIDS and SARS have been detected in India, which pose a threat to human capital and are detrimental to economic growth.
3. There is a lack of trained and skilled healthcare personnel in rural areas, as a result of which patients have to visit urban health centres. The lack of proper roads and poor transportation make matters worse.
4. The government health centres lack basic medical facilities and modern equipment. People need to pay high fees in order to get tests done.

**18. How has women's health become a matter of great concern?**

Women's health has become a concern due to the following reasons:

1. There is a decline in woman's population as per child sex ratio which has become 927 females in comparison to 1000 males.
2. It has been seen that around 50% of the female population in the age group of 15-49 are anaemic due to iron deficiency, which leads to deaths during childbirth accounting for 19% of women's deaths.
3. Abortions are one of the main causes of female deaths.

**19. Describe the meaning of public health. Discuss the major public health measures undertaken by the state in recent years to control diseases.**

The act of protecting the health of the public through research, education and promotion of a healthy lifestyle is referred to as public health. It aims to improve the health and well-being of people around the world by addressing the health concerns of an entire population. The following are the public health measures taken by the government:

1. Primary Health care Centers set up at the village level to provide healthcare services.
2. Hospitals and dispensaries increased from 9300 to 43300, and hospital beds showed an increase to 7.2 million in 2000, up from 1.2 million in 1951.
3. Paramedical and nursing staff has increased from 0.18 lakhs to 8.7 lakhs. Similarly, doctors practising allopathy increased from 0.62 lakhs to 5 lakhs during the period of 1951-2000.
4. Introduction of various facilities and better vaccination has resulted in the eradication of polio, pox, leprosy and other such diseases.

**20. Differentiate the six systems of Indian medicine.**

Following are the six systems of Indian medicine:

1. Ayurveda
2. Yoga
3. Unani
4. Siddha
5. Homeopathy
6. Naturopathy

**Ayurveda:** A traditional form of medicine that is in practice in India. Ayurveda recommends diet and lifestyle changes coupled with drug therapy as a source of recovery.



**Yoga:** An art form that has significantly gained popularity in recent years. It originated in India. Maharshi Patanjali was instrumental in writing a book which is still serving as the handbook of yoga. It is practised for a healthy body, mind and spirit.

**Unani:** Unani is similar to Ayurveda and was introduced in the 10th century AD. It establishes disease as a natural process and the symptoms being the reactions to those symptoms.

**Siddha:** Siddha form of medicine is practised in India and originated in Tamil Nadu. It is one of the oldest systems of treatment. It is a unique form of treatment.

**Homoeopathy:** Homeopathy means similar treatment. In this form of treatment, both the drug and the disease produce similar symptoms, which ultimately cancel each other. It is preferred by many due to its healing properties.

**Naturopathy:** Naturopathy believes in the healing power of nature and considers fasting as a way to recover. Proper rest coupled with fasting helps a body recover.

### **21. How can we increase the effectiveness of healthcare programmes?**

The effectiveness of healthcare programmes can be increased in the following ways:

1. Power should be delegated from central to local authorities
2. Use of mediums such as TV, internet, radio and newspaper can help spread more awareness among people
3. Providing quality medical facilities at nominal costs is a good way to be more effective
4. Improving the doctor-patient ratio is also a good step
5. Increasing the number of medical colleges and health care centres in the country