

NCERT SOLUTIONS CLASS-11 ECONOMICS

CHAPTER- 8

NCERT Solutions for Class 11 Economics for chapter 8 Infrastructure

Exercises

Question 1. Explain the term 'infrastructure'.

Answer.

'Infrastructure' refers to all the supporting services, which are necessary for smooth & efficient operation of all economic activities such as industrial and agricultural production, domestic and foreign trade and commerce. These supporting services include basic facilities like ports, roads, railways, airports, dams, pipelines, telecommunication facilities, gas pipelines, education & health services, sanitation, banking system, insurance and other facilities. These above facilities are divided into economic and social infrastructure; which have direct or indirect impact on production of goods and services.

Question 2. Explain the two category into which infrastructure is divided. How are both interdependent?

Answer.

Infrastructure is divided into two categories – economic and social. Economic infrastructure comprises of facilities (like transportation, communication, etc.) which affect the production activities directly, whereas social infrastructure comprises of facilities (like health, education, sanitation, etc.) which affect the production activities (more or less) indirectly. Development of economic infrastructure leads to improvement in social infrastructure. Social infrastructure leads to development of human capital, which in turn helps in improving the economic infrastructure. In this way, both infrastructures are interdependent on each other.

Question 3. How does infrastructure boost production?

Answer.

Developed infrastructure boosts production through reduction in cost of production. Infrastructure facilitates smooth and cost effective completion of all the production related activities. This reduced cost leads to expansion of production. For example: Construction of roads reduces transportation costs and time, efficient banking system contributes towards smooth movement of capital, improvement in technology contributes towards effective production of output, improvement in facilities related to education, sanitation and health improves the overall status of human capital in the economy.

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

Answer.

Yes, Infrastructure is very crucial for economic development of a country. Infrastructure is defined as the supporting services which facilitate industrial and agricultural activities. It includes transportation, power, dams, telecommunications, health & education facilities, monetary systems, etc. Infrastructure supports in enhancing productivity of factors of production, developing the human capital and raising the standard of living. Improvement in any of these factors represents economic development. Thus we can say infrastructure contribute to economic development.

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

Answer.

The state of rural infrastructure in India is really disappointing. People in rural areas are still using bio- fuels such as cow dung, firewood and agricultural waste despite of so much progress in the world.

According to census 2001:

1. 56% of rural population has no electricity connection.
2. 43% of the rural population use kerosene oil.
3. 90 % of rural people are still using bio fuel.
4. Tap water facilities are only available to 24 percent rural households.
5. More than 70% of population relies on open sources like wells, rivers, canals, etc. for drinking water.

Despite of efforts by the central and state governments, rural India still lacks in connectivity (paved roads, rail, etc), financial system (easy credit availability, banking facilities, etc), energy (electricity), agricultural facilities (HYV seeds, canals, credit, etc), education facilities (teachers, senior secondary schools, colleges) and healthcare facilities (hospitals, maternal care centres, etc).

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

Answer.

Energy plays a very important role in development process of any economy. Now, energy has become a need for every sector of the economy. Initially, industries only required energy, but now 'energy' is playing a significant role in development of the agricultural sector as well. Household sector also requires energy for the purposes of cooking, electricity and heating. The sources of energy can be classified as commercial sources and non-commercial sources. The differences between the two sources of energy are as follows:

Commercial Sources

1. These are extracted from nature through processing, thus can be bought or sold.
2. These are exhaustible.
3. These are non-renewable.
4. These are used for commercial purposes.
5. Examples: Coal, gas, oil, etc.

Non-Commercial Sources

1. These sources are available naturally, no processing is required.
2. These are non-exhaustible.
3. These are renewable sources.
4. These are used for domestic purposes.
5. Firewood, agricultural waste and cow dung

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

Answer. Thermal power, Wind power and Hydel power are the three basic sources of generating power. Nuclear power also emerging as an important source of generating power.

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

Answer.

In Power & Electricity Scenario, transmission and distribution losses are the losses which occur between the source of supply and the final consumer. These losses are due to:

1. Consumption by the distribution intermediaries, which is inevitable.
 2. Leakages in the distribution system.
 3. Inefficient management of distribution & transmission.
 4. Inefficient pricing mechanism.
 5. Theft in the process of distribution & transmission.
 6. Use of outdated technology of transmission and distribution.
-

These losses can be reduced by:

1. Controlling leakages and theft from distribution system through strict action.
2. Updating technology of transmission and distribution.
3. Restructuring the pricing mechanism.
4. Managing the distribution and transmission process effectively.

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

Answer.

Non-commercial sources of energy are generally renewable sources which are not to be bought and are easily available. Firewood, agricultural waste and bio fuels are some of the non-commercial sources of energy. These are non-exhaustible and are basically used for domestic purposes.

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

Answer.

As the world is making progress, it is moving towards the need for sustainable development due to scarcity of resources. Sustainable development can only be achieved through judicious use of available resources. This judicious use can be achieved through using less of non-renewable resources and increased use of renewable resources. Energy sector which is moving towards crisis can successfully escape this through using the same principle; i.e. reducing the use of non-renewable innovating and increasing the use of renewable sources. There is wide range of option available for renewable energy such as hydel energy, solar energy and wind energy. Specifically in the case of India; it being in the tropical-equatorial region with wide availability of plain surfaces, long rivers, high exposure to sunlight, it can use these alternate renewable sources for energy quite comfortably. Likewise others can also choose to produce energy by renewable sources depending on their geographical situation.

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

Answer.

To keep up with the sustainable development goals defined by United Nations, there has been a considerable shift in consumption patterns of energy around the world. There has been a decline in consumption of coal as a source of energy due to its disadvantages and increase in consumption of oil & gas; simultaneously, an increase in use of renewable sources of energy as an alternative. In India, sectoral pattern of consumption of energy has gone through drastic change. In a span of last 50 year,

Transport sector share in consumption of energy has declined from 44% to 2%. Industrial sectors share of consumption has increased from 40% in 1953-54 to 45% in 2013-14 only. Meanwhile, share of household, agriculture and other sector has jumped considerably. Household consumption of energy has increased from 10% to 22% and agricultural consumption of energy has increased from 1% to 18% over a span of 60 years.

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

Answer.

There is a bidirectional relationship between consumption of energy and economic growth. Increase in rates of consumption of energy leads to economic growth and on the other hand, economic growth leads to increase in rates of consumption of energy. But there is a catch in the above statement, the former part of the statement is more relevant in the scenario of developing economies whereas latter part is a characteristic of developed economy. Energy sector play crucial role in economic development as energy is required by all sector to flourish whether it be transportation, agriculture, business, etc. Rate of consumption of energy by different sectors defines in which phase of development the economy is now.

Economies with high consumption of energy in agricultural and related sector are considered under- developed and developing, whereas economies with high rate of consumption by non-agricultural sectors are considered developed.

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

Answer.

The problems faced by power sector in India are:

1. Huge losses incurred by State Electricity Boards (SEBs) due to theft and corruption in distribution systems.
2. Incapability of private power sector to play a critical role.
3. Shortage of raw material and coal supplies for thermal power stations.
4. Insufficiency of installed capacity of power sector to back the growth rate of 7-8% annually.
5. Public unrest due to acute power shortages and increased power tariffs.
6. Increasing power demand from rising population.
7. Incapability of power sector to expand power distribution networks to remotest areas of the country.

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

Answer.

India is the fourth largest producer of electricity & fourth largest consumer of electricity. It has fifth largest installed capacity in the world. Since independence, power sector has evolved drastically and major change came up with the enactment of Electricity Regulatory Commission Act 1998 and Electricity Act 2003. These acts led to liberalisation of the power sector with increased investments from private firms and private- public partnerships. These Acts have allowed

1. Privatisation of the distribution networks (BSES, NDPL, etc).
2. Privatisation & private public partnerships in transmission networks (Powerlinks Transmission Ltd, etc).
3. Setting up of Central and State regulatory electricity commissions to regulate tariff of power generating companies. (CERC & SERC)
4. Allowing foreign capital inflows (FDI) in the power sector.

Government has launched awareness campaigns like National Energy Efficiency Program to encourage citizens to reduce and use power more efficiently and promote the use of renewable energy. Central Power Research Institute (CPRI) and National Power Training Institute (NPTI) are research & development bodies created to carry out essential research related to the schemes of power sector.

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

Answer.

Indian constitution obligates the government of India to regulate and guide all the health related issues of the country. Health status of country is evaluated on the basis of indicators such as infant mortality and maternal mortality rates, life expectancy and nutritional levels, etc. The following table shows some of the health indicators of India according to World Health Statistics Survey 2013:

Indicators	India
Infant mortality rates per 1000 births	44
Under -5 yrs mortality per 1000 births	56
Birth by skilled Attendants (%of total)	67
Health Expenditure as per % of GDP	3.9
Life expectancy	67

1. India has high level of infant mortality and maternal mortality rates as compared to the global standards.
2. Life expectancy in India is 67 which is way below the average life expectancy globally
3. Health expenditure in India was 3.9 % of GDP in 2012 as compared to 12.5% in china and 20.5% in USA.
4. India has 17% of world population but bears 20% global burden of diseases (GBD).
5. Less than 30% percent of population has access to medical facilities, whereas there is acute shortage of medical personnel as well as essential medicine in less developed areas of the country.

Question 16. What is a 'global burden of disease'?**Answer.**

Global Burden of Diseases (GBD) is an indicator used by experts to evaluate the number of people dying prematurely owing to disease as well as number of years spent by these people in 'disability' owing to disease. India has 17% of world population but bears 20% global burden of diseases (GBD).

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

The main drawbacks of Indian healthcare system are:

1. There is a rural urban divide, despite of the fact that 70% of population lives in the rural areas, only one-fifth of hospitals, half of dispensaries, 30% of beds available in the government hospitals are at their disposal. This creates a wide gap in health status of rural-urban people.
2. In Indian health care system there is lack of modern facilities at hospital, non availability of essential facilities at local health centres, low doctor to patient ratio, lack of skilled medical personnel, etc.
3. Indian health care system is not well equipped to fight diseases like HIV, AIDS, Zika-virus, etc.
4. Health expenditure as percentage of GDP is very low as compared to other countries, developed or developing.
5. Inability of public sector to provide health care facilities has led to private sector to provide the same. But, there is no mechanism to regulate the monetary aspect of the private sector which exploits the general public.

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

Women's health has become a matter of greater concern because

1. Half of the total population of India consists of females.
2. Sex-ratio (females per 1000 males) in India is deteriorating.
3. There has been no considerable decline in female feticide.
4. Nearly 300,000 girls are married around the age of 15 years and have already borne their first child.
5. 50% married women have anemia and nutritional anemia caused due to iron deficiency.
6. Due to lack of maternal care there are increased maternal deaths.
7. Abortions have also come up as a reason for maternal morbidity and female mortality.
8. Socio factors in India also play an important role in deteriorating health status of women like domestic violence, patriarchy, etc.

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

Public health refers to all the measures taken up by public or private sector to prevent diseases and to keep the whole population healthy. Indian constitution obligates the government to ensure right to health for every citizen. Central Council of Health and Family Welfare has been formed which provides assistance to government in implementing health related policies through analysis of information and data collected over the years related to health. Indian health system has been expanding over the years. Health system in India follows a three-tier system – primary, secondary and tertiary. In recent years, several major measures have been taken by state to control diseases. Some of them are

1. Organisation of camps to immunize children from polio, leprosy, small pox, diphtheria, tetanus, etc.
2. Spreading awareness about diseases like (AIDS, HIV, TB) and measures to control them through use of all types of advertisement media.
3. Expansion in number of government hospitals and dispensaries which has led to increased bed capacity from 1.2 to 6.3 lakh.
4. Increased number of Primary Health Centres (PHCs) and hospitals managed by voluntary agencies and private organisations at the village level.

5. Expansion in skilled professionals and para-medical professionals through opening of new medical and pharmacy colleges.
6. Increased efforts by states to raise awareness about the use of clean and safe drinking water.
7. Swachh Bharat Mission is a recent programme, which promotes cleanliness and proper sanitation around us.

Question 20. Differentiate the six systems of Indian medicine.

Answer.

Ayurveda, Unani, Yoga, Siddha, Naturopathy and Homeopathy are the six systems of Indian medicine. Ayurveda is an ancient Indian medicine system which is based on balance of bodily systems through herbal treatment, healthy diet and yogic breathing. Unani is ancient greek medicine system which travelled with muslim rulers to india. This system is based on keeping a balance between 4 humors (blood, phlegm, yellow bile and black bile) in the body. The diagnosis is done chiefly by checking the pulse (nabz). Yoga is hindu spiritual and ascetic discipline which includes breath control, simple meditation and adopting specific bodily postures practiced for health and relaxation. Siddha is an ancient medicine system prevalent in south india. It believes that human body consists of five elements – earth, fire, air, space and water. Food is the basic building material of human body and gets processed into humors, tissue and waste. Equilibrium of humors is considered as health whereas disturbances or imbalances lead to unhealthy state. Naturopathy is a system of medicine based on treating diseases without the use of drugs, by controlling diet, performing exercise regularly and massage. Homeopathy is a system which is used to treat diseases with minimum doses of natural substances that if taken in large amounts can produce ailment in a healthy body also.

Question 21. How can we increase the effectiveness of health care programmes?

Answer.

The constitution obliges its citizen with a right to health which obligates the government to address all the health related issues, whether that be medical education, adulteration of food, medical profession or any other. Centre Council for Health and Family Welfare which comes under central government evaluates information and provides assistance to state governments, union governments and other bodies in implementing important health programmes. These programmes haven't been able to perform as desired, so there is a need to make these programmes effective.

These programs can be made effective through

1. Decentralisation - local authorities shall be provided with enough power to implement customised version of the programmes which suite their requirements.
2. Raising awareness about the health issues, hygiene, clean habits and sanitation.
3. Providing everyone with best health facilities at minimal cost.
4. Increasing health care facilities for women.
5. Use of modern medical techniques, increase in no. of medical institutes to improve the doctor to patient ratio.
6. Regulating private medical sector & encouraging competition between them.
7. Developing health related infrastructure like health insurance, medical loans, etc.