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CLASS 8 — SOCIAL SCIENCE (GEOGRAPHY)

CHAPTER 1
RESOURCES

Complete Study Notes | MCQs | Short & Long Answer Questions

For CBSE & State Board Students | British English Edition

Topics Covered	5 Topic-wise Sections
MCQ Questions	15 Multiple Choice Questions
Short Answer Questions	8 Questions (~35 words each)
Long Answer Questions	4 Questions (~60 words each)
Textbook Exercises	All answers included
Language	British English
School	ClassOrb.com
Teacher	Om Sikarwar

TOPIC 1 — WHAT IS A RESOURCE?

Mona and Raju were helping Amma to clean their house. 'Look at all these things — clothes, utensils, foodgrains, combs, a bottle of honey, books. Each of these has a use,' said Mona. 'That is why they are important,' said Amma.

Raju asked: **'What is a resource?'** Amma replied — **'Anything that can be used to satisfy a need is a resource.'**

Definition of a Resource

A resource is anything that can be used to satisfy a need.

Resources must have UTILITY (usefulness) and VALUE (worth).

Examples: water, electricity, rickshaw, textbook, vegetables — all are resources.

What is Utility?

Water, electricity, rickshaw, vegetables and textbook all have something in common — they have all been used by you. Because they are useful, they have **UTILITY**. Utility or usability is what makes an object or substance a resource.

What is Value?

Things become resources only when they have a **VALUE**. Value means worth. Some resources have economic value (such as metals and minerals), whilst others may not (such as a beautiful landscape). Both are important as they satisfy human needs.

Key Point — Resources Can Gain Value Over Time

Your grandmother's home remedies have no commercial value today.

But if they are patented and sold by a medical firm, they could become economically very valuable.

This shows that value of a resource can change with time and technology.

Glossary

Utility = The quality of being useful; usability — what makes something a resource.

Value = Worth of a resource — may be economic or non-economic.

Patent = Exclusive right granted to a person over any idea or invention.

TOPIC 2 — HOW DO SUBSTANCES BECOME RESOURCES?

Two important factors can change substances into resources:

Factor	How It Helps	Example
TIME (Samay)	Gives opportunity for knowledge to develop and needs to evolve	Home remedies gaining value when patented

Factor	How It Helps	Example
TECHNOLOGY (Taknik)	Latest knowledge and skill used to make or do things	Hydroelectricity from fast-flowing water

Most Important Resource — PEOPLE THEMSELVES!

People are the most important resource on Earth.

Their ideas, knowledge, inventions and discoveries create more resources.

The discovery of FIRE led to cooking and many other processes.

The invention of the WHEEL led to newer modes of transport.

Technology to create HYDROELECTRICITY turned fast-flowing water into an energy resource.

Glossary

Technology = The application of the latest knowledge and skill in doing or making things.

TOPIC 3 — TYPES OF RESOURCES

Resources are generally classified into three main types:

Type	Definition	Examples
Natural Resources	Drawn from nature, used with little modification	Air, water, soil, minerals, forests
Human Made Resources	Created by modifying natural resources	Buildings, roads, machinery, technology
Human Resources	People — their knowledge, skills and abilities	Farmers, scientists, teachers, doctors

A) NATURAL RESOURCES

Resources that are drawn from Nature and used without much modification are called **natural resources**. The air we breathe, the water in our rivers and lakes, the soils and minerals are all natural resources. Many of these are free gifts of nature and can be used directly. In some cases, tools and technology may be needed to use a natural resource in the best possible way.

Natural resources can be broadly categorised into **renewable** and **non-renewable** resources.

i) Renewable Resources

Definition of Renewable Resources

Renewable resources are those which get renewed or replenished quickly.

Some are unlimited and not affected by human activities — solar energy, wind energy.

Others like water, soil and forests CAN be affected by careless overuse.

Water seems unlimited but shortage of natural water is a major global problem today.

Renewable Resource	Why It Is Renewable
Solar Energy	Unlimited — the sun continuously provides energy
Wind Energy	Unlimited — wind is always available in nature
Water	Replenishes through the water cycle (rain, rivers, lakes)
Forests	Trees can regrow if given time and care

ii) Non-Renewable Resources

Definition of Non-Renewable Resources

Non-renewable resources are those which have a LIMITED STOCK.

Once exhausted, they may take THOUSANDS OF YEARS to be renewed or replenished.

Since this period is far greater than a human lifespan, they are called non-renewable.

Examples: Coal, Petroleum and Natural Gas.

Non-Renewable Resource	Why It Is Non-Renewable
Coal	Formed over millions of years; cannot be quickly replaced
Petroleum (Oil)	Formed from ancient organisms; limited underground reserves
Natural Gas	Fossil fuel with limited stock; takes millions of years to form

Why Is Natural Resource Distribution Unequal?

The distribution of natural resources depends upon physical factors:

1. TERRAIN — the physical landscape of the land

2. CLIMATE — temperature, rainfall and weather patterns

3. ALTITUDE — height above sea level

These factors differ greatly across the earth, making resource distribution unequal.

Glossary

Stock of Resource = The amount of resources available for use.

Terrain = The physical features of a land area.

Altitude = Height above sea level.

B) HUMAN MADE RESOURCES

Sometimes, natural substances become resources only when their original form has been changed. Iron ore was not a resource until people learnt to extract iron from it. People use natural resources to make buildings, bridges, roads, machinery and vehicles — these are known as **human made resources**. Technology is also a human made resource.

Examples of Human Made Resources

Buildings and Houses — made from stone, sand, cement (natural resources modified)

Roads and Bridges — made from iron, stone and concrete

Machinery and Vehicles — made from metals extracted from the earth

Technology and Medicines — created using human knowledge and natural ingredients

Electricity (generated by dams, power plants) — energy harnessed from nature

C) HUMAN RESOURCES

People can make the best use of nature to create more resources when they have the knowledge, skill and the technology to do so. That is why human beings are a special resource. **People are human resources.**

Education and health help in making people a valuable resource. Improving the quality of people's skills so that they are able to create more resources is known as **human resource development**.

Do You Know?

Human Resource = the number (quantity) AND abilities (mental and physical) of people.

It is the SKILLS of humans that help in transferring physical material into a valuable resource.

Education + Health = More valuable Human Resources.

Human Resource Development = improving people's skills to create more resources.

Read and Ponder

Humans are interdependent on each other.

Farmers provide food grains for everyone in society.

Scientists suggest ways to combat problems in agriculture and improve farm production.

Each person's skill and knowledge contributes to the creation of resources for all.

TOPIC 4 — CONSERVING RESOURCES

Mona had a nightmare. She dreamt that all the water on the earth had dried up and all the trees had been cut down. There was no shade and nothing to eat or drink. People were suffering and roaming around desperately looking for food and shade.

She asked Amma: 'Can this really happen?' Amma replied: 'Yes! If we are not careful, even renewable resources can become very scarce and non-renewable ones can definitely get exhausted.'

Resource Conservation

Using resources carefully and giving them time to get renewed is called RESOURCE CONSERVATION.

Balancing the need to use resources AND conserving them for the future is called SUSTAINABLE DEVELOPMENT.

Each person can contribute by: Reducing consumption | Recycling | Reusing things.

All our lives are linked — so every small effort makes a meaningful difference.

What Children Did to Help:

- Made packets and bags from old newspapers, discarded clothes and bamboo baskets
- Distributed these to every family they knew
- Mustafa pledged not to waste electricity — 'Electricity comes from water and coal'
- Jessy pledged not to waste paper — 'Many trees are cut down to make paper'
- Asha pledged not to waste water — 'Every drop of water is precious'
- Together they said: 'Together we can make a difference!'

Our Duty Towards the Earth

The future of our planet is linked to our ability to preserve nature's life support system.

It is our duty to ensure that:

1. All uses of renewable resources are sustainable

2. The diversity of life on the earth is conserved

3. The damage to natural environmental systems is minimised

Glossary

Resource Conservation = Using resources carefully and giving them time to renew.

Sustainable Development = Carefully utilising resources to meet present needs whilst also taking care of future generations.

TOPIC 5 — PRINCIPLES OF SUSTAINABLE DEVELOPMENT

Principle	What It Means
Respect and care for all forms of life	Value every living organism on earth — plants, animals, humans
Improve the quality of human life	Ensure education, health and opportunity for all people
Conserve the earth's vitality and diversity	Protect ecosystems and maintain biodiversity
Minimise depletion of natural resources	Use natural resources wisely to avoid exhaustion
Change personal attitude towards environment	Each individual must adopt eco-friendly habits
Enable communities to care for environment	Empower local communities to manage their surroundings

MULTIPLE CHOICE QUESTIONS (MCQs)

(The correct answer is shown in green for each question)

Q1. Anything that can be used to satisfy a need is called a _____.	(A) Commodity (B) Resource (C) Product (D) Raw material	**(B) Resource**
Q2. The quality that makes an object or substance a resource is _____.	(A) Quantity (B) Colour (C) Utility (D) Shape	**(C) Utility**
Q3. Which of the following does NOT make a substance a resource?	(A) Utility (B) Value (C) Quantity (D) Usability	**(C) Quantity**
Q4. Resources drawn from nature with little modification are called _____.	(A) Human made resources (B) Natural resources (C) Human resources (D) Artificial resources	**(B) Natural resources**
Q5. Solar energy and wind energy are examples of _____ resources.	(A) Non-renewable (B) Human made (C) Renewable (D) Exhaustible	**(C) Renewable**
Q6. Coal, petroleum and natural gas are examples of _____ resources.	(A) Renewable (B) Human made (C) Human resources (D) Non-renewable	**(D) Non-renewable**
Q7. Buildings, bridges, roads, machinery and vehicles are examples of _____.	(A) Natural resources (B) Human resources (C) Human made resources (D) Renewable resources	**(C) Human made resources**
Q8. Which one of the following is a human made resource?	(A) Medicines to treat cancer (B) Spring water (C) Tropical forests (D) Mineral deposits	**(A) Medicines to treat cancer**
Q9. People are regarded as _____ resources.	(A) Natural (B) Human made (C) Non-renewable (D) Human	**(D) Human**
Q10. Improving people's skills to create more resources is called _____.	(A) Resource conservation (B) Sustainable development (C) Human resource development (D) Technology development	**(C) Human resource development**
Q11. Using resources carefully and giving them time to renew is called _____.	(A) Sustainable development (B) Resource conservation (C) Human resource development (D) Resource utilisation	**(B) Resource conservation**
Q12. Balancing resource use with conservation for future generations is called _____.	(A) Resource conservation (B) Non-renewable development (C) Sustainable development (D) Technology	**(C) Sustainable development**
Q13. Natural resource distribution depends on _____.	(A) Human population (B) Terrain, climate and altitude (C) Available technology (D) Economic value	**(B) Terrain, climate and altitude**

Q14. Which of the following is an example of a non-renewable resource?	(A) Solar energy (B) Wind energy (C) Petroleum (D) Water	**(C) Petroleum**
Q15. Two important factors that can change substances into resources are _____.	(A) Water and soil (B) Time and technology (C) Money and labour (D) Climate and terrain	**(B) Time and technology**

SHORT ANSWER TYPE QUESTIONS (~35 Words)

(Important for both CBSE and State Board examinations)

Q1. What is a resource? Give two examples.

Answer:

A resource is anything that can be used to satisfy a need. It must possess utility and value. Examples include water, electricity, textbooks, vegetables and minerals. Resources may be natural, human made or human in nature, and all serve to meet human requirements.

Q2. What is utility and why is it important?

Answer:

Utility means the quality of being useful or usable. It is utility that transforms an ordinary substance into a resource. Without utility, no substance — however abundant — qualifies as a resource. For example, water satisfies thirst and supports agriculture, so it has utility and is a resource.

Q3. What is the difference between renewable and non-renewable resources?

Answer:

Renewable resources replenish quickly — such as solar energy, wind and water. Non-renewable resources have a limited stock and take thousands of years to replenish — such as coal, petroleum and natural gas. Once exhausted, non-renewable resources cannot be recovered within a human lifetime.

Q4. What are human made resources? Give examples.

Answer:

Human made resources are created when people modify natural substances into new useful forms. Iron ore is natural, but iron extracted to build bridges is a human made resource. Buildings, roads, machinery, vehicles and technology are all human made resources created by processing natural materials.

Q5. Why are people considered the most important resource?

Answer:

People possess knowledge, skills, ideas and technology that lead to the creation of more resources. Human intelligence transforms natural substances into valuable products. Education and health improve the quality of human resources, enabling greater productivity and continuous innovation for the benefit of society.

Q6. What is resource conservation?

Answer:

Resource conservation means using resources carefully and giving them sufficient time to renew or replenish. It involves reducing consumption, recycling and reusing materials. Since all our lives are interconnected, every individual's conservation effort makes a meaningful difference to the environment and future generations.

Q7. What is sustainable development?

Answer:

Sustainable development means carefully utilising resources to meet present needs without compromising future generations' ability to meet their own needs. It balances development with conservation. Its aims include preserving earth's biodiversity, minimising environmental damage and changing personal attitudes towards resource use.

Q8. Why is natural resource distribution unequal across the earth?

Answer:

Natural resource distribution depends on physical factors such as terrain, climate and altitude. These factors vary greatly across different regions. Consequently, some areas are rich in certain resources whilst others have very little. For example, coal is found only in specific geological formations worldwide.

LONG ANSWER TYPE QUESTIONS (~60 Words)

(Important for CBSE 5-mark questions)

Q1. What is a resource? Explain how utility and value make something a resource.

Answer:

A resource is anything that can be used to satisfy a need. However, not every available substance qualifies as a resource — it must possess two essential qualities: UTILITY and VALUE.

UTILITY refers to the usefulness of an object or substance. It is utility that transforms an ordinary substance into a resource. For example, water is a resource because it satisfies thirst, supports agriculture and generates hydroelectricity. A stone lying unused in a field has no utility and is therefore not a resource.

VALUE means worth. Some resources have economic value — such as metals and minerals — whilst others like beautiful landscapes have non-economic value. Both types are important as they satisfy different human needs.

Resources can also gain economic value over time. Your grandmother's home remedies may have no commercial value today, but if patented and sold by a medical firm, they could become highly valuable. Therefore, Utility + Value together determine whether something qualifies as a resource.

Q2. Explain the three types of resources with examples.

Answer:

Resources are broadly classified into three types: natural resources, human made resources and human resources.

1. NATURAL RESOURCES are drawn from nature and used with little or no modification. Air, water, soil, sunlight and minerals are natural resources. They are further divided into:

- Renewable resources: replenish quickly — solar energy, wind energy, water and forests.

- Non-renewable resources: limited stock, take thousands of years to form — coal, petroleum and natural gas.

2. HUMAN MADE RESOURCES are created when people modify natural substances. Iron ore is natural, but bridges and machinery made from iron are human made. Buildings, vehicles, roads and technology are all human made resources.

3. HUMAN RESOURCES refer to people themselves — their knowledge, skills, education and health. People are the most important resource because human intellect and effort transform natural substances into valuable resources. Improving human skills is called human resource development.

All three types work together to support human life and development across the world.

Q3. What is resource conservation? Why is it necessary and what can individuals do?

Answer:

Resource conservation means using resources carefully and giving them sufficient time to be renewed or replenished. It is the responsible and mindful use of both renewable and non-renewable resources to prevent their depletion.

CONSERVATION IS NECESSARY BECAUSE:

Even renewable resources like water, soil and forests can be permanently damaged by careless overuse. Non-renewable resources such as coal, petroleum and natural gas will eventually be exhausted if consumed at the current rate. Once gone, these resources cannot be recovered within a human lifetime.

Balancing the use of resources with their conservation for the future is called SUSTAINABLE DEVELOPMENT.

WHAT INDIVIDUALS CAN DO:

- Reduce consumption of electricity, water and paper
- Recycle waste materials wherever possible
- Reuse items such as bags, bottles and containers
- Avoid unnecessary wastage in daily life

In the chapter, children made bags from old newspapers, cloth and bamboo to reduce waste. Such collective efforts — however small — make a meaningful difference because all our lives are connected to the health of our planet.

Q4. What is sustainable development? Explain its key principles.

Answer:

Sustainable development is the careful utilisation of resources in a manner that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

It recognises that human progress must not come at the cost of the environment. The earth's natural life support systems — clean air, fresh water, fertile soil and biodiversity — must be preserved for generations to come.

KEY PRINCIPLES OF SUSTAINABLE DEVELOPMENT:

1. Respect and care for all forms of life on earth

2. Improve quality of human life through education, health and opportunity

3. Conserve the earth's vitality and diversity by protecting ecosystems

4. Minimise the depletion of non-renewable natural resources

5. Change personal attitudes and practices towards the environment

6. Enable communities to care for and manage their own local environment

Every citizen has a duty to ensure that renewable resource use is sustainable, diversity of life is conserved, and damage to natural systems is minimised. Sustainable development is not only a government responsibility — it is the shared duty of every individual on this planet.

TEXTBOOK EXERCISES — ANSWERS

1. Answer the Following Questions:

(i) Why are resources distributed unequally over the earth?

Answer:

Resources are distributed unequally because their occurrence depends on physical factors such as terrain, climate and altitude. These physical conditions vary greatly from one region to another. Some areas are rich in certain resources whilst others have very little. For example, coal is found only in specific geological formations, and petroleum is concentrated in particular regions.

(ii) What is resource conservation?

Answer:

Resource conservation means using resources carefully and giving them sufficient time to get renewed or replenished. It involves avoiding waste, reducing consumption and using resources wisely. Conservation ensures resources remain available for future generations. Key methods include reducing consumption, recycling waste and reusing items rather than discarding them.

(iii) Why are human resources important?

Answer:

Human resources are important because people possess knowledge, skills, ideas and the ability to use technology to create more resources from natural substances. It is human intelligence and effort that transforms raw natural materials into valuable products. Education and health further improve human resource quality, enabling greater productivity and innovation for society.

(iv) What is sustainable development?

Answer:

Sustainable development means carefully utilising resources to meet present requirements without endangering future generations' ability to meet their own needs. It balances development with conservation. Principles include respecting all life forms, conserving earth's diversity, minimising natural resource depletion, and changing personal attitudes towards the environment for long-term planetary health.

2. Tick the Correct Answer:

Question	Options	Correct Answer
(i) Which does NOT make a substance a resource?	(a) utility (b) value (c) quantity	(c) Quantity
(ii) Which is a human made resource?	(a) medicines (b) spring water (c) tropical forests	(a) Medicines to treat cancer
(iii) Non-renewable resources are:	(a) limited stock (b) made by humans (c) from non-living things	(a) Those with limited stock

CHAPTER SUMMARY — Quick Revision

Term	Meaning
Resource	Anything that can be used to satisfy a need
Utility	Usefulness — what makes a substance a resource
Value	Worth of a resource — economic or non-economic
Patent	Exclusive right granted over an idea or invention
Natural Resources	Drawn from nature with little modification
Renewable Resources	Replenish quickly — solar, wind, water, forests
Non-Renewable Resources	Limited stock — coal, petroleum, natural gas
Human Made Resources	Created by modifying natural substances
Human Resources	People — their knowledge, skills and abilities
Human Resource Development	Improving people's skills to create more resources
Technology	Application of latest knowledge and skill
Stock of Resource	Amount of a resource available for use
Resource Conservation	Using resources carefully; giving them time to renew
Sustainable Development	Meeting present needs without harming future generations
Terrain	Physical features of a land area
Altitude	Height above sea level
Hydroelectricity	Electricity generated from fast-flowing water
Biodiversity	Variety of all living organisms on earth

Key Differences — Important for Examinations

Renewable Resources	Non-Renewable Resources
Replenish quickly	Take thousands of years to replenish
Unlimited or large stock available	Limited stock — will eventually exhaust
Examples: Solar, wind, water	Examples: Coal, petroleum, natural gas
Cannot be easily exhausted	Can be permanently exhausted

Natural Resources	Human Made Resources
Drawn directly from nature	Created by human beings using natural resources
Used with little or no modification	Require processing and modification of natural material

Natural Resources	Human Made Resources
Examples: Air, water, soil, minerals	Examples: Buildings, roads, machines, technology
Free gifts of nature	Result of human effort and intelligence

All the Very Best! Work Hard and Success Will Follow.

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