

What are Natural Resources?

Natural resources are substances or living organisms found within the Earth's crust that can be used for economic benefits, such as energy, food, shelter, and other human needs.

2. **Non-Renewable Resources**: Cannot be replenished naturally over time.

- Fossil fuels (coal, oil, gas)
- Minerals (iron, copper, gold)
- Nuclear energy (uranium)
- Metals (aluminum, steel)

Characteristics of Natural Resources:

1. **Availability:** Accessibility and abundance.
2. **Exhaustibility:** Can be depleted over time.
3. **Replenishment:** Ability to renew or regenerate.
4. **Substitutability:** Ability to replace with alternative resources.

Importance of Natural Resources:

1. **Economic growth:** Support industries and employment.
2. **Energy security:** Meet energy demands.
3. **Food security:** Provide food and nutrition.
4. **Environmental sustainability:** Maintain ecosystem balance.
5. **Human well-being:** Support health, shelter, and quality of life.

Classification of Natural Resources:

1. **Biotic Resources:** Living organisms (plants, animals).
2. **Abiotic Resources:** Non-living substances (water, minerals).
3. **Inorganic Resources:** Non-carbon based (minerals, water).
4. **Organic Resources:** Carbon-based (plants, animals).

Examples of Natural Resources:

1. **Water:** Rivers, lakes, oceans.
2. **Minerals:** Iron, copper, gold.
3. **Forests:** Timber, paper, medicine.
4. **Fisheries:** Fish, seafood.
5. **Soil:** Agriculture, construction.

Conservation and Management:

1. **Sustainable use:** Balance human needs with resource availability.
2. **Conservation:** Protect and preserve resources.
3. **Recycling:** Reuse and reduce waste.
4. **Regulations:** Laws and policies governing resource use.

Environmental Impact:

1. **Pollution:** Air, water, soil contamination.
2. **Climate change:** Resource extraction and consumption.
3. **Deforestation:** Habitat destruction.
4. **Overfishing:** Depletion of fish populations.

Case Studies:

1. **Amazon Rainforest:** Deforestation and conservation.
2. **Oil spills:** Environmental impact and regulation.
3. **Renewable energy:** Transition from fossil fuels.

Key Terms:

1. Resource depletion
2. Sustainability
3. Conservation
4. Biodiversity
5. Ecosystem services

Discussion Questions:

1. What are the importance of natural resources?
2. How can we conserve natural resources?
3. What are the impacts of resource depletion?
4. How can renewable energy replace non-renewable energy?
5. What role do governments play in natural resource management?

Activities:

1. Research local natural resources.
2. Create a diagram illustrating resource classification.
3. Debate: "Should natural resources be privatized?"
4. Write a persuasive essay on conservation.
5. Develop a sustainable resource management plan.