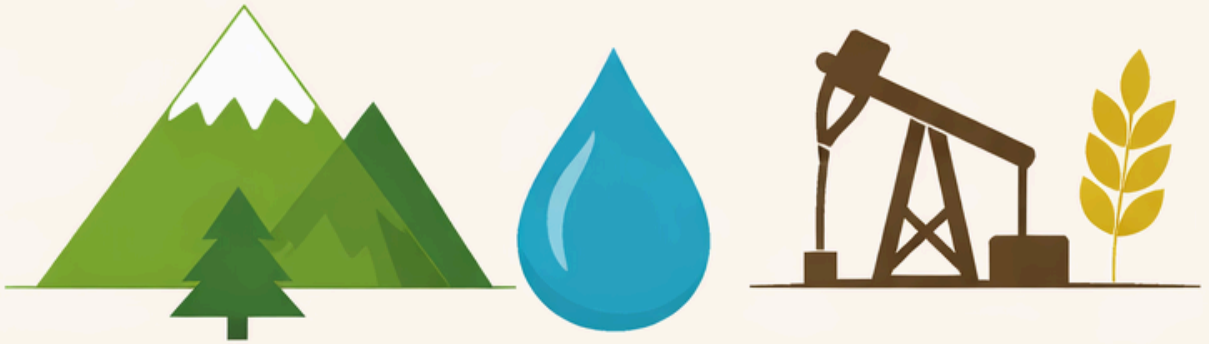
CHAPTER 8: NATURAL RESOURCES

GEOGRAPHY



AMIT ACADEMY
ANKLESHWAR

CLASS 10th GSEB

Uses of Resources

- Resources are very important for human life at every stage.
- All activities like agriculture, industry, and daily life depend on resources.

AMIT ACADEMY
ANKLESHWAR

1. Resources as Food

1. Fruits & Crops from Agriculture

2. Milk, Meat & Dairy Products

3. Fish & Aquatic Animals

4. Honey from Honeybees

These resources fulfill our food needs.

Classification of Resources

1. Ownership

2. Availability (Re-usability)

3. Distribution

AMIT ACADEMY
ANKLESHWAR

Classification Based on Ownership

1. Individual Resources

- Owned by a person or family
- Land, House, Building


Land


House

2. National Resources

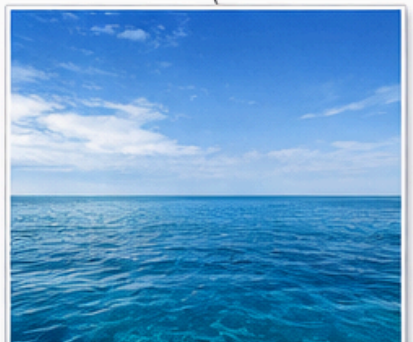
- Owned by a country or government
- Army, Railways
  International Trade


Army


Railways

3. Global Resources

- Shared by all countries of the world
- Used for human welfare
- Atmosphere, Oceans



AMIT ACADEMY
ANKLESHWAR

Classification Based on Distribution

1. Universal Resources

- Found everywhere

Examples: Oxygen, Nitrogen

2. Generally Available Resources

- Easily available in many places

Examples: Land, Soil, Water, Pasture Land

3. Rare Resources

- Found at limited places

Examples: Coal, Petroleum, Copper, Gold, Uranium

4. Solitary Resources

- Found only at one or two places

Example: Cryolite (found mainly in Greenland)

Classification Based on Re-availability

AMIT ACADEMY
ANKLESHWAR

1. Renewable Resources

- Can be used again or reproduced naturally.

Examples: Solar energy, Wind, Water, Plants, Animals

2 Non-renewable Resources

- Cannot be reused or take very long time to form.

Examples: Coal, Petroleum, Natural Gas, Minerals

Planning & Conservation of Resources

AMIT ACADEMY
ANKLESHWAR

1. Human needs are unlimited, but resources are limited.
2. Due to population growth and scientific development, resource use has increased rapidly.
3. If resources are not conserved, future generations will suffer.
4. Therefore, resources must be used wisely, carefully, and rationally.

Meaning of Conservation

- Proper Use
- Protection
- Reuse
- Finding Alternatives

- **Conservation** means saving resources from overuse and wastage.
- It includes **proper use**, **protection**, **reuse**, and finding alternatives.
- Conservation is necessary when resources become scarce or **endangered**.

Steps for Planning and Conservation of Resources

AMIT ACADEMY
ANKLESHWAR

1 Collect Information about Resources

Collect information about used, unused, and potential resources of a region or country.

2 Use Non-Renewable Resources Scientifically

Limited and non-renewable resources should be used scientifically and only when necessary.

3 Increase Renewable Resources

Efforts should be made to increase renewable resources.

4 Avoid Wastage of Cheap and Easily Available Resources

Cheap and easily available resources should not be wasted.

5 Conserve Scarce Resources and Develop Alternatives

Scarce resources must be conserved and alternatives should be developed using technology.

6 Enforce Strict Laws for Conservation

Strict laws should be made and enforced for resource conservation.

7 Educate and Raise Awareness

People should be educated and made aware about the proper use of resources.

Understanding Soil

AMIT ACADEMY
ANKLESHWAR

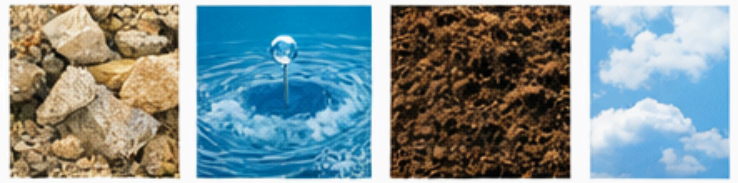
1 Top Layer of the Earth

Where plants grow

2 Thin Layer on Surface

Found on Earth's surface

3 Components of Soil



Minerals Water Humus Air

4 Weathering of Rocks

Breakdown of parent rocks

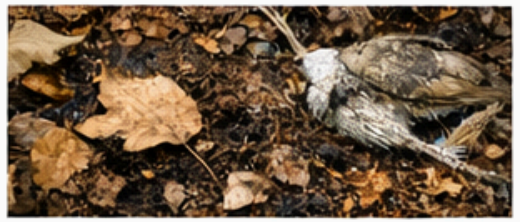
8 Supports Plant Growth

Helps plants develop

5 Parent Rock

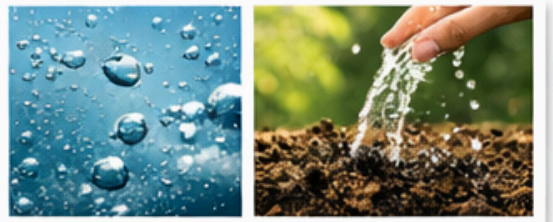
Rocks beneath the soil

6 Organic Material



Dead Plants & Animals

7 Air & Water



Air Water

Types of Soil

1. Alluvial Soil

2. Black Soil
(Regur Soil)

3. Red Soil

Amit Academy
Ankleshwar

4. Laterite Soil

5. Desert Soil

6. Forest Soil

7. Marshy or Peaty Soil

6. Mountain Soil

AMIT ACADEMY
ANKLESHWAR

ALLUVIAL SOIL

Rich & Fertile Soil
Formed by River Deposits
(Alluvium)

1 COVERAGE IN INDIA

- Alluvial soil covers about **43%** of India's total area.

2 WHERE IT IS FOUND

- Found in the northern plains, from the **Brahmaputra valley** in the east to the **Sutluj river** in the west.

3 DELTA REGIONS OCCURRENCE

- Also found in the delta regions of the **Mahanadi, Godavari, Krishna,** and **Kaveri** rivers.

4 FORMATION

- This soil is formed by river deposits (alluvium).

5 NUTRIENT CONTENT

- It contains more potash, phosphoric acid, and limestone, but less nitrogen and humus.

6 IMPROVING NITROGEN

- Growing pulses helps increase nitrogen in this soil.

7 CROPS GROWN

- Crops grown in alluvial soil include wheat, rice (paddy), sugarcane, jute, cotton, maize, and oilseeds.

Red Soil

AMIT ACADEMY
ANKLESHWAR

1 19% of India's Land Area

2 Regions Found

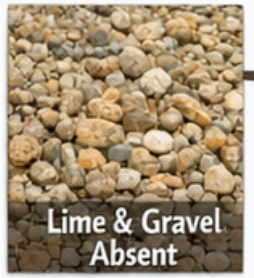
- Tamil Nadu to Bundelkhand
- Rajmahal Hills to Kachchh
- Parts of Rajasthan

3 Red Colour Due to Iron Oxide

4

5 Lacks Nutrients

- No Lime
- No Magnesium
- No Nitrogen
- No Phosphorus
- No Potash



5 Yellowish Lower Layers

6 No Lime & Gravel

7 Crops Grown in Red Soil

Black Soil
(Regur Soil)

1. Covers 15% of India's Total Area

2. Formed from Deccan Lava

3. Found in Maharashtra, MP, AP & Karnataka

4. Present in Gujarat (Surat, Bharuch, Vadodara, Tapi, Dang)

5. Rich in Iron, Lime, Potash, etc.

6. Develops Cracks When Dry

7. Crops: Cotton, Mustard, Groundnut, Tobacco, Urad

8. Also Known as Black Cotton Soil

Laterite Soil

1. "Laterite" from Latin "Later"

2. Red Due to Iron Oxide

3. Soft When Wet, Very Hard When Dry

1. "Laterite" from Latin

4. Formed Due to Wet & Dry Climate + Leaching of Silica

7. Less Fertile Naturally

AMIT ACADEMY
ANKLESHWAR

5. Found in Higher Areas of Peninsular Plateau

6. Contains Iron, Aluminium, Potash

8. Crops: Cotton, Rice (Paddy), Ragi, Sugarcane, Tea, Coffee, Cashew

Desert Soil

1. Arid & Semi-Arid Regions

Dry Desert Landscape

2. Sandy & Less Fertile

Sandy Soil

AMIT ACADEMY
ANKLESHWAR

3. Rich in Dissolved Minerals

Mineral Deposits

4. Regions in India

Rajasthan, Haryana, Gujarat

Crops Grown with Irrigation

Millet

Jowar

Mountain Soil

AMIT ACADEMY
ANKLESHWAR

Mountain Soil

- Altitude
  2700–3000 metres
- Thin & Poorly Developed

- Found in Assam

- Darjeeling

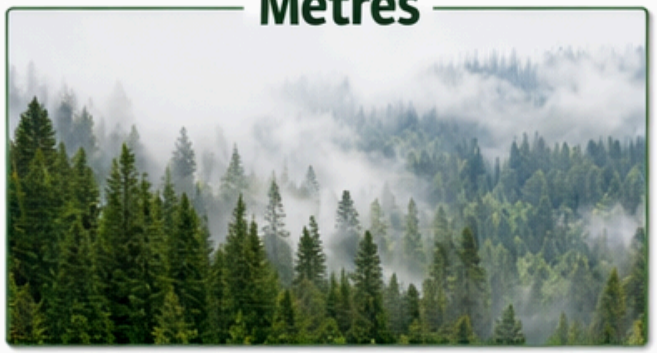
- Uttarakhand & Himachal Pradesh

- Pine & Deodar Forests

Forest Soil

AMIT ACADEMY
ANKLESHWAR

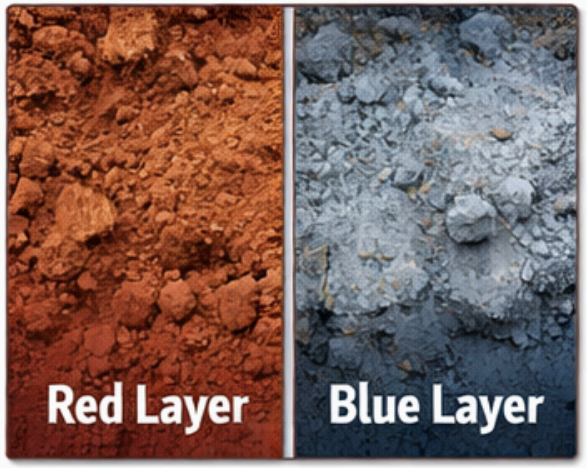
1 Altitude 3000–3100 Metres



2 Coniferous Forests

3 Rich in Humus

4 Colourful Layers



5 Crops Grown

Tea, Coffee, Spices, Wheat, &More

6 Limited Area

Marshy or Peaty Soil

AMIT ACADEMY
ANKLESHWAR

1 Humid Regions

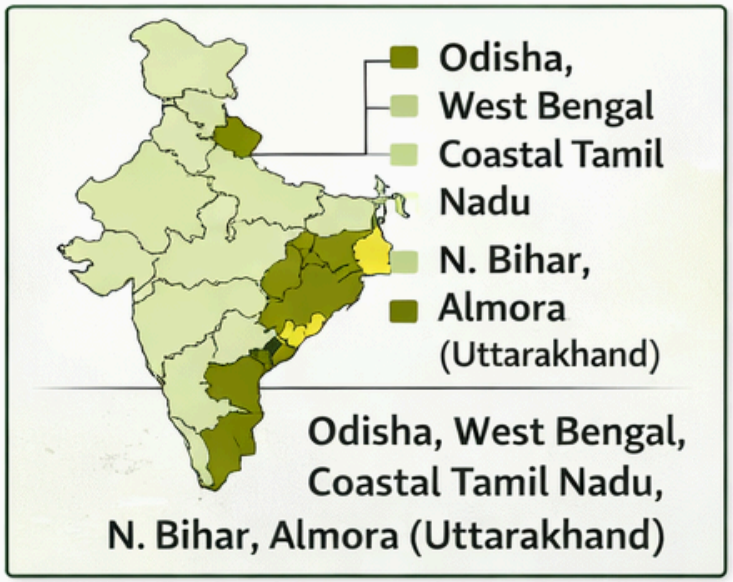
2 High in Organic Matter

3 Waterlogged During Rains

4 Rice Grown After Rains

5 Lacks Nutrients

6 Small Area in India



Soil Erosion

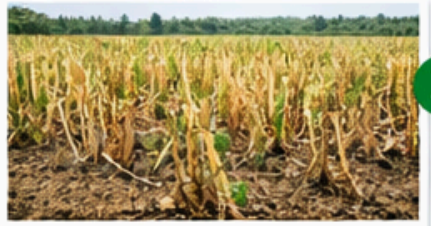
Removal of topsoil by water and wind.

AMIT ACADEMY
ANKLESHWAR

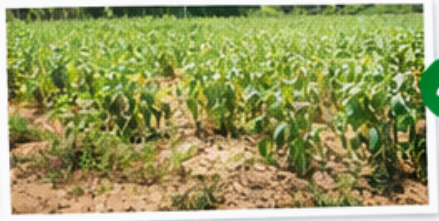
Effects of Soil Erosion

1. Loss of Topsoil

2. Reduced Soil Fertility



3. Decreased Crop Yield



4. Lowered Agricultural Production

Measures to Prevent Soil Erosion

1. Control Overgrazing

2. Contour Farming

3. Plant Trees on Barren Land

4. Build Check Dams

Soil Conservation

AMIT ACADEMY
ANKLESHWAR

1. Contour Plowing

- Plowing Along Contour Lines

2. Tree Planting

- Roots Hold Soil
- Prevent Erosion

3. Terracing

- Step-like Fields
- Reduce Runoff

Remedies / Methods of Soil Conservation

AMIT ACADEMY
ANKLESHWAR

1. Tree Planting

- Roots Hold Soil

2. Check Grazing

- Restrict Grazing

3. Flood Control

- Divert Excess Water

4. Windbreaks

- Reduce Strong Winds

5. Terrace Farming

- Farming on Steps
- Slope Cultivation

6. Add Humus

- Increase Fertility