

UNIT 1(PART 2)

Natural Resources and their Conservation

Topics to be covered:-

- 1) **Forest Resources:** Uses and overexploitation of forests and consequences of deforestation.
- 2) **Water Resources:** Use and consequences of over-utilization, concept of rain water harvesting and watershed management, water conflicts.
- 3) **Food Resources:** Sources of food, food problems- Indian scenario, Impacts of modern agriculture on
- 4) environment (Fertilizer - pesticide problem, water logging and salinity), Organic farming.
- 5) **Energy Resources:** Renewable and Non-Renewable energy sources, growing energy needs and alternate energy sources.
- 6) **Land Resources:** Global land use patterns, Soil erosion, Desertification, Wasteland Reclamation.

Sustainable Development Activities (For Chart Paper Work)

1. **Forest Resources – “Adopt a Tree” Campaign Poster**
 - Students create a chart showing trees they “adopt,” with details: type, uses, oxygen produced, animals supported.
 - Add slogans: *“One Tree, One Life”*.
2. **Forest Resources – Deforestation Consequences Infographic**
 - Draw the forest “Before & After” cutting: animals lost, soil erosion, climate impact.
 - Use arrows/flowchart style to show cause–effect.
3. **Water Resources – Rainwater Harvesting Model (2D Chart)**
 - Sketch how rainwater is collected from rooftops into underground tanks.
 - Highlight benefits: groundwater recharge, reduced water bills.

4. Water Resources – Watershed Management Flowchart

- Diagram showing contour bunding, check dams, vegetation cover.
- Add photos or drawings of real-life watershed projects.

5. Food Resources – Organic vs Chemical Farming Comparison Chart

- Split chart in half: one side modern agriculture (pesticides, fertilizers, pollution), other side organic farming (bio-fertilizers, earthworms, eco-friendly).

6. Food Resources – India's Food Problems Awareness Poster

- Use pie charts or graphs to show malnutrition, food wastage, population growth vs food production.
- Add a slogan: *"Save Food, Save Nation"*.

7. Energy Resources – Renewable vs Non-renewable Energy Chart

- Draw solar, wind, hydro vs coal, oil, natural gas.
- Use a traffic light theme: *Green = Safe, Red = Dangerous*.

8. Energy Resources – Alternate Energy Sources Poster

- Present biogas, tidal, hydrogen fuel cells.
- Show how they reduce pollution and meet future energy needs.

9. Land Resources – Soil Erosion & Desertification Awareness Chart

- Show diagrams of "healthy soil vs eroded soil."
- Illustrate causes (deforestation, overgrazing) and prevention (planting, terracing).

10. Land Resources – Wasteland Reclamation Success Story Poster

- Research and draw an Indian example (e.g., Rajasthan desert greening, Alwar's water revival, (Alwar district of Rajasthan to reverse decades of severe drought and water scarcity.)
- Show "before vs after" pictures with solutions like afforestation, organic manure.