Natural resources

NATURAL RESOURCES: These things include water (seas and fresh water), land, soils, rocks, forests (vegetation), animals (including fish), fossil fuels and minerals. They are called Natural Resources and are the basis of life on earth.

It may exist:

(i) As a separate ENTITY

(ii) As a LIVING ORGANISM

(iii) As most forms of ENERGY

(iv) In an ALTERNATE FORM

CLASSIFICATION

1. On the basis of **ORIGIN:**

• **BIOTIC:** Biotic resources are resources derived from the biosphere such as living things and from forest and the materials derived from them. This mainly includes fossil fuels like petroleum, coal gas, etc.

• **ABIOTIC:** Abiotic means other than living things that mean non-living things examples are fresh air, land ,heavy metal.

2. On the basis of **STAGE OF DEVELOPMENT**

2.(a) POTENTIAL RESOURCES:

• Exist in a religion

• Maybe used in future.

Eg. PETROLEUM → it occurs with sedimentary rocks, but until it is drilled out for use, it remains a potential resource.

2.(b) ACTUAL RESOURCES:

Eg. WOOD PROCESSING → depends on the technology available and cost involved.

2.(c) RESERVE RESOURCES:

• PART of an actual resource

• DEVELOPED profitably in future

2.(d) STOCK RESOURCES :

• SURVEYED resources

• CANNOT BE USED

• Due to lack of technology

E.g. Hydrogen

3. On the basis of RENEWABILITY

• RENEWABLE RESOURCES

• NON – RENEWABLE RESOURCES

NATURAL RESOURCE CONSERVATION:

MAJOR OBJECTIVES:

1. CONSERVING earths biological diversity

2. SAFEGUARDING ecosystem services

It Involves :

• Public policy

• Sustainable Development

⟹ A careful preservation and protection of a natural resource to PREVENT exploitation or destruction.

CONSERVATION METHODS

1. Get TANK LESS WATER HEATER as it reduces the usage of natural gas.

2. Buy a HYBRID CAR to conserve fossil fuels.

3. RECYCLING products that come from trees.

4. Hydro power and solar power sources

5. Use REUSABLE cloth bags.

6. Replace light bulbs with LED.

7. Get rid of objects containing mercury.

ROLE FOR INDIVIDUAL IN CONSERVATION OF RESOURCES

Every individual has the responsibility to use natural resources judiciously.

This will give equal opportunity to all to use the resources for the benefit of mankind.

NEED FOR CONSERVATION

(i) The amount of natural resources is decreasing.

(ii) Loss of energy resources has been caused by deforestation.

(iii) International capacities conserving the resources are not properly organized.

(iv) To preserve biodiversity

OBJECTIVES OF CONSERVATION

(i) To ENSURE, of resources for survival availability sustainability

(ii) To PRESERVE is diversity at specific levels.

(iii) To MAINTAIN the essential ecological process is and the life support system.

LAND RESOURCE

⟹ An essential natural resource for survival and prosperity of humanity

Increased demand on land resources, shows :

1. Declining crop production
2. Degradation of land quality
3. Competition for land

LAND DEGRADATION: A process in which the value of the BIOPHYSICAL ENVIRONMENT IS AFFECTED by a combination of human – induced processes acting upon the land.

It is viewed as ANY CHANGE I DISTURBANCE to the Land perceived to be

- DELETERIOUS
- UNDESIRABLE

DESERTIFICATION: A type of land degradation in which DRY of land becomes ARID, losing its bodies of:

- WATER
- VEGETATION
- WILDLIFE

CAUSES

(i) Climate change

(ii) Overexploitation of soil through human activity

SOIL DEATH

⟹ When deserts emerge due to DEPLETION OF NATURIENTS

- RAMPANT
- UNCHECKED

In soil that are essential for it remain ARABLE.

CAUSE: Loss of vegetation

- DROUGHT
- CLIMATIC SHIFTS
- OVERGRAZING

The rate of erosion and runoff decreases exponentially with increased vegetation cover.

(iii) **POPULATION:** With increase in population, more land is needed LEADING TO increasing pressure on limited land resources.

(iv) **DAMAGE TO TOP SOIL:** Increase in food production leads to nutrient depletion.

(v) Fertilizers and Pesticides.

(vi) Water logging

(vii) Salination

(viii) Contamination

EFFECTS OF LAND DEGRADATION

(i) Soil structure and texture are deteriorated.

(ii) Loss of soil fertility

(iii) Increase in alkanity and acidity problems

(iv) Loss at social, economic and biodiversity level

LANDSLIDES

⟹ The downward movement of a slope composed of earth materials.

Also known as:

• SOIL – CREEP

• ROCK – SLIDE

• DEBRIS – SLIDE

• SLUMP

• EARTH – FLOW

During construction, huge portions of fragile areas are cut down and thrown into adjacent streams and areas.

These land masses weaken the fragile slopes LEADING to man – induced landslides.