

MODULE II : NATURAL RESOURCES

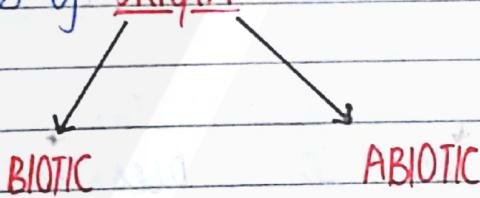
→ The resources that exist without actions of mankind.

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



2) On the basis of STAGE OF DEVELOPMENT

2.1. POTENTIAL RESOURCES :

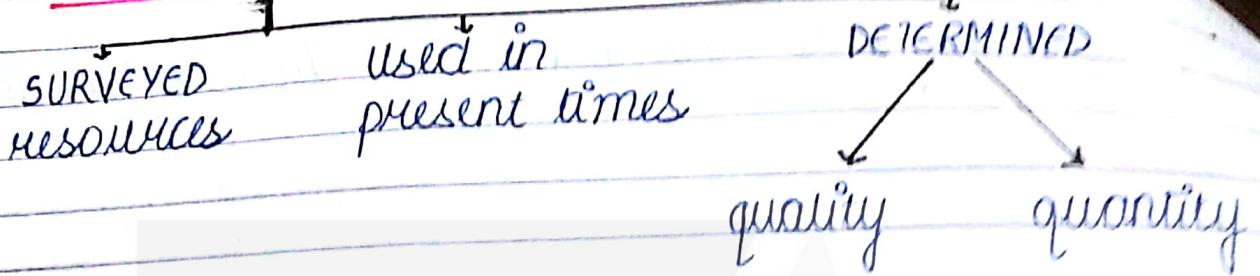
Exist in a religion

Maybe used in future

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

Spiral

2.2. ACTUAL RESOURCES:

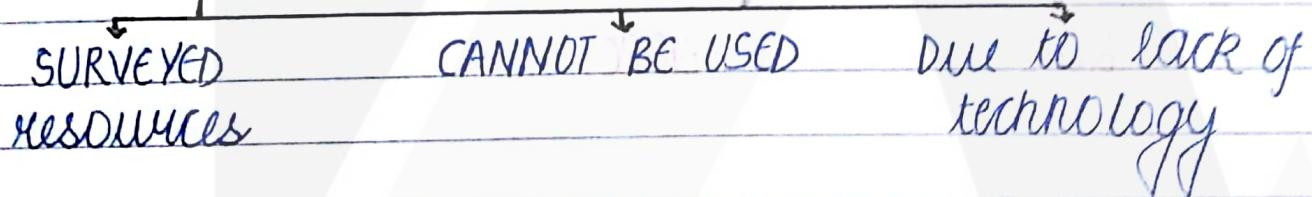


EG: WOOD PROCESSING → Depends on the technology available and cost involved

2.3. RESERVE RESOURCES:

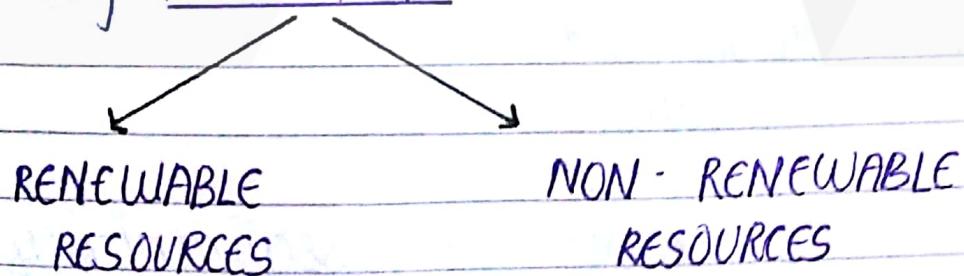


2.4. STOCK RESOURCES:



EG: Hydrogen

3] On the basis of RENEWABILITY



NATURAL RESOURCE CONSERVATION

MAJOR OBJECTIVES :

- 1) CONSERVING earth's 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 TANKLESS WATER HEATER as it reduces the usage of natural gas.
- 2) BUY A HYBRID CAR to consume 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 OF 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 availability of resources for survival.
- ii) To PRESERVE diversity at specific levels.
- iii) To MAINTAIN the essential ecological processes 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 / DISTURBANCE to the land perceived TO BE

DELETERIOUS UNDESIRABLE

DESERTIFICATION : A type of land degradation in which DRY AREA 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 NUTRIENTS

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) Water-logging

viii) Salination

ix) Contamination

EFFECTS OF LAND DEGRADATION

- 1) Soil structure and texture are deteriorated.
- 2) Loss of soil fertility
- 3) Increase in alkalinity and acidity problems
- 4) 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.