



Government of Tamil Nadu
Department of Employment and Training

Course : TNPSC Combined Civil Services Examination - IV(Group IV / VAO)

Subject : Geography

Topic : SOILS - MINERALS - NATURAL RESOURCES

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SOILS - MINERALS - NATURAL RESOURCES

Resource

Resource is anything that fulfills human needs. All resources have value. The value can be either commercial or non-commercial.

Few Resources

Natural Resources(Primary)	Forest, Hunting
ManMade Resources(Secondary)	Sugar Factory ,Road
Human Resources(tertiary)	School, Scientist

Classification of Natural Resources on the Basis of Origin

Biotic resources

All living resources are biotic resources, plants, animals and other micro organisms.

Abiotic resources

Non-living things. Land, water, air and minerals are abiotic resources.

Classification of Natural Resources on the Basis of Development

Actual resources

Actual resources are resources that are being used and the quantity available is known. (e.g.) Coal at Neyveli.

Potential resources

Potential resources are resources that are not being used in the present and its quantity and location are not known.

Classification of Natural Resources on the Basis of Exhaustibility

Renewable resources

Resources once consumed can be renewed with the passage of time are called renewable resources. (e.g.) Air, Water, Sunlight

Non-Renewable resources

Natural resources which are limited can be called non-renewable resources. They become exhausted after use. (e.g.) Coal, petroleum, natural gas

Classification of Natural Resources on the Basis of Distribution

Localized resources

When resources are present in specific regions they are called localized resources. (e.g.) Minerals.

Universal resources

Some resources are present everywhere Such resources are called universal resources. (e.g.) Sunlight and air.

Classification of Natural Resources on the Basis of Ownership

Individual resources

Individual resources are resources privately owned by individuals. (e.g.) Apartments.

Community-Owned resources

Community-owned resources are resources which can be utilised by all the members of the community. (e.g.) Public parks.

National resources

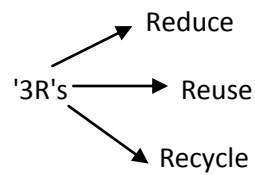
National resources are resources within the political boundaries and oceanic area of a country. (e.g.) Tropical forest regions of India.

International resources

International resources are all oceanic resources found in the open ocean.

Conservation of Resources

The easiest way to conserve resources is to follow the



Soil Resource

Soil is the mixture of rock debris and organic materials which develop on the earth's surface.

Soil Fertility

It refers to amount of nutrient in the soil which is sufficient to support plant growth.

Classification of Soils

1. Alluvial soils
2. Black soils
3. Red and Yellow soils
4. Laterite soils
5. Mountain Soil
6. Desert Soil

Alluvial Soil

- It consists of sediments deposited by rivers along the river course, flood plains, delta.
- These soils are more loamy and clayey in the lower and middle Ganga plain and the Brahmaputra valley

Types

1. Khadar – Newer Alluvium
2. Bhangar – Older Alluvium

Black Soil

- These soils are also known as the 'Regur Soil' or the 'Black Cotton Soil'.
- The black soils are generally clayey, deep and impermeable
- Black soil covers most of the Deccan Plateau which includes parts of Maharashtra, Madhya Pradesh, Gujarat, Andhra Pradesh and some parts of Tamil Nadu.

Red Soil

- Red Soil develops on crystalline igneous rocks in areas of low rainfall.
- These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess.

Laterite Soil:

- Laterite has been derived from the Latin word 'Later' which means brick.
- These are the result of intense leaching due to tropical rains. With rain, lime and silica are leached away, and soils rich in iron oxide and aluminium compound are left behind. Humus content of the soil is removed fast by bacteria that thrives well in high temperature.
- laterites are not suitable for cultivation;
- Found in peninsular plateau.

Mountain Soil

- This soil is found in mountaneous regions likewestern and eastern ghats ,Himalayas ,siwaliks
- This soil is rich in humus and organic matter

Desert Soil

- It is found in the zone of north western part of india ,Gujarat(kutch region) and south Punjab.
- This soil is alkaline and highly infertile

Soil Erosion

Means removal of fertile content from the soil by means of nature or man.

Soil Conservation

Efforts made by man to prevent soil erosion. Few methods are

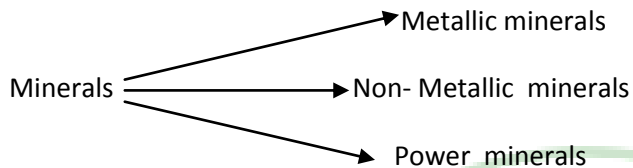
- Construction of dams.
- Step cultivation
- Avoid excessive grazing
- Application of natural manures rather than chemical fertilizers.

Minerals

Minerals are non renewable sources which has certain physical and chemical properties.

Ore

A rock which has large concentration of particular mineral is called ore.



Metallic Mineral

These minerals contain metals. Eg: iron,copper,gold,tin,aluminium

Non Metallic mineral

These minerals do not contain metals. Eg: Asbestos,sulphur,mica,limestone

Power mineral

These are non metallic mineral which are very important fuel resources.

Eg: petroleum,uranium,thorium.

Ores	Minerals
Haematite,Magnetite,Siderite,Limonite	Iron
Bauxite	Aluminium
Cassiterite	Tin

Mining

It is the process of extraction of valuable minerals from earth.

Geography GK

Meghalaya Mining Disaster:

- ★ By December 2018 more than a month 15 miners got trapped inside an illegal rat-hole mine in Meghalaya
- ★ The 'rat-hole' technique was banned by the National Green Tribunal (NGT) in 2014
- ★ The technique involves digging of small tunnels which are just over three-four feet high, in order to extract coal