

Class 10

Social Science (Geography)

Lesson 1: Resource and Development

**Topic: Soil as a Resource
(Explanation Resource)**

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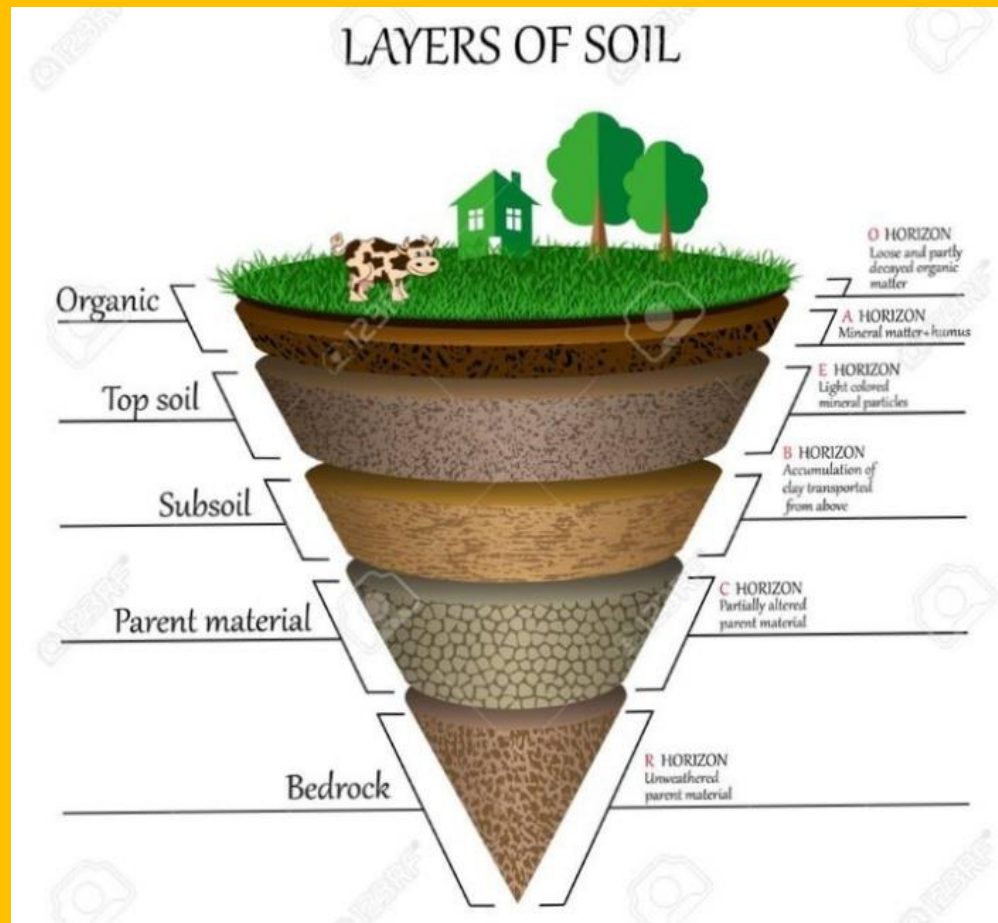
Soil as a Resource



Soil

- Renewable natural resource
- Support plant growth and organisms
- Example: Vegetation and life form in different area.

Soil Profile



Classification of Soil

Soil is classified as follows

- Alluvial Soil
- Black Soil
- Red and Yellow Soil
- Laterite Soil
- Arid Soil
- Forest Soil/Mountain Soil

Alluvial Soil

- Formation: Role of Himalayan Rivers

Role of Deltas

- Location: Northern Plains
Coastal Areas

- Duars, Chos and Terai in Piedmant Plains
- Khadar- New soil
- Bangar- Old Soil
- Content – Potash, Phosphoric acid and lime
- Crops – sugarcane, paddy, wheat, cereal and pulse crop



Black Soil

- Formation: i) Climatic conditions and parent rock
ii) Deccan trap made up of Basalt
- Location: Plateaus of Maharashtra, Saurashtra, Malwa, M.P and Chattisgarh
- Clayey nature, holds water for long
- Content: Calcium, Magnesium, Potash and lime
- Crops: Cotton, Sugarcane



Red and Yellow Soil

- Formation: Crystalline igneous rocks in areas of low rainfall
- Location: South eastern and eastern part of our country
- Reddish and yellow due to diffusion of iron in crystalline and metamorphic rocks.
- Red in dehydrated form and yellow in hydrated form
- Content: Igneous rock with iron
- Crops: Plantation(Tea, coffee and rubber)



Red Soil in India

Laterite soil

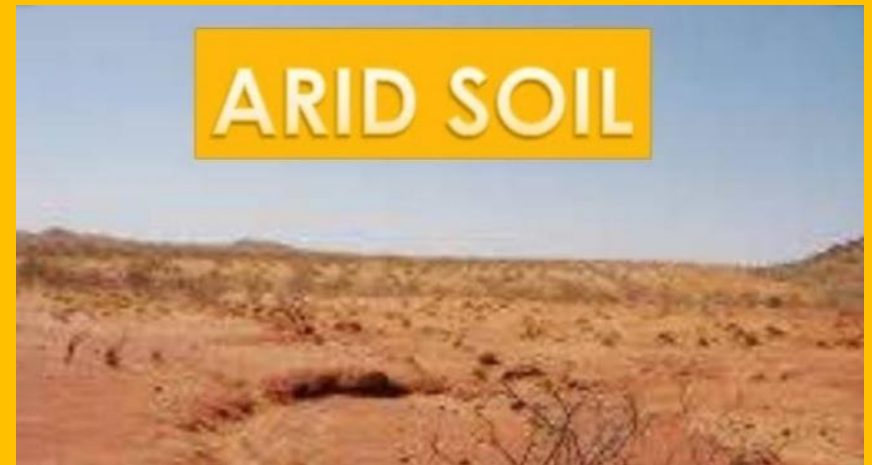
- Formation: High temperature and heavy rainfall
- Location: Western ghats and northeastern states
- Lacks humus content
- Content: ore of various minerals
- Crops: Plantation crops (Tea and Coffee)



Arid Soil

- Formation: High temperature and low rainfall
- Sandy texture and saline in nature
- Presence of Kankar nodules
- Location: North western part of India
- Is it cultivable????

Yes, but with proper irrigation and manure



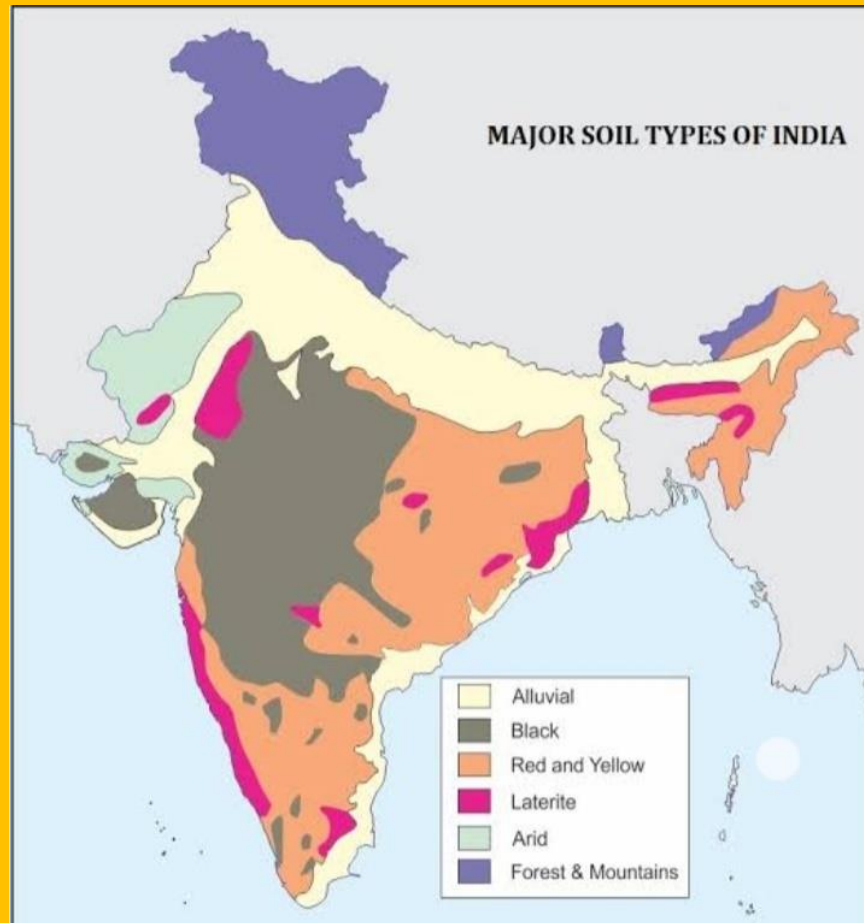
Forest/Mountain Soil

- Formation: Mechanical withering by snow, rain and temperature
- Location: Hilly areas (Kashmir to Arunachal)
- Loamy and silty in valley and coarse grained in the upper slopes



Mountain Soil

Let's observe the map.....



Now let's go through some questions...

- Soil is a resource because_____
- Soil is classified in _____ types.
- Which soil is having major contribution of the Himalayan rivers for its formation?
- Which soil is best for cotton cultivation?
- Where does the laterite soil develop?
- Name the crops which can be grown in laterite soil?
- What type of soil develops due to high temperature and evaporation?
- Where do we find forest soil in India?
- Why is does red and yellow soil obtain its colour?

Think....

Recall the slides....

Let's discuss the answers now...

- Soil is a resource because it supports plant growth and organisms.
- Soil is classified in six types.
- Alluvial soil is having major contribution of the Himalayan rivers for its formation.
- Black soil is best for cotton cultivation.
- Laterite soil develops in areas having high temperature and heavy rainfall.
- Tea and coffee can be grown in laterite soil.
- Arid soil develops due to high temperature and evaporation.
- We find forest soil in the hilly areas of India i.e., Kashmir to Arunachal.
- The red and yellow soil obtain its colour due to diffusion of iron in crystalline and metamorphic rocks.

Let's try map marking now....

- Locate the following on the given map of India.
 - a) Alluvial Soil
 - b) Black Soil
 - c) Red and Yellow Soil
 - d) Laterite Soil
 - e) Arid Soil
 - f) Forest Soil

Try it...



Thank You

