

# Geography – Std.10

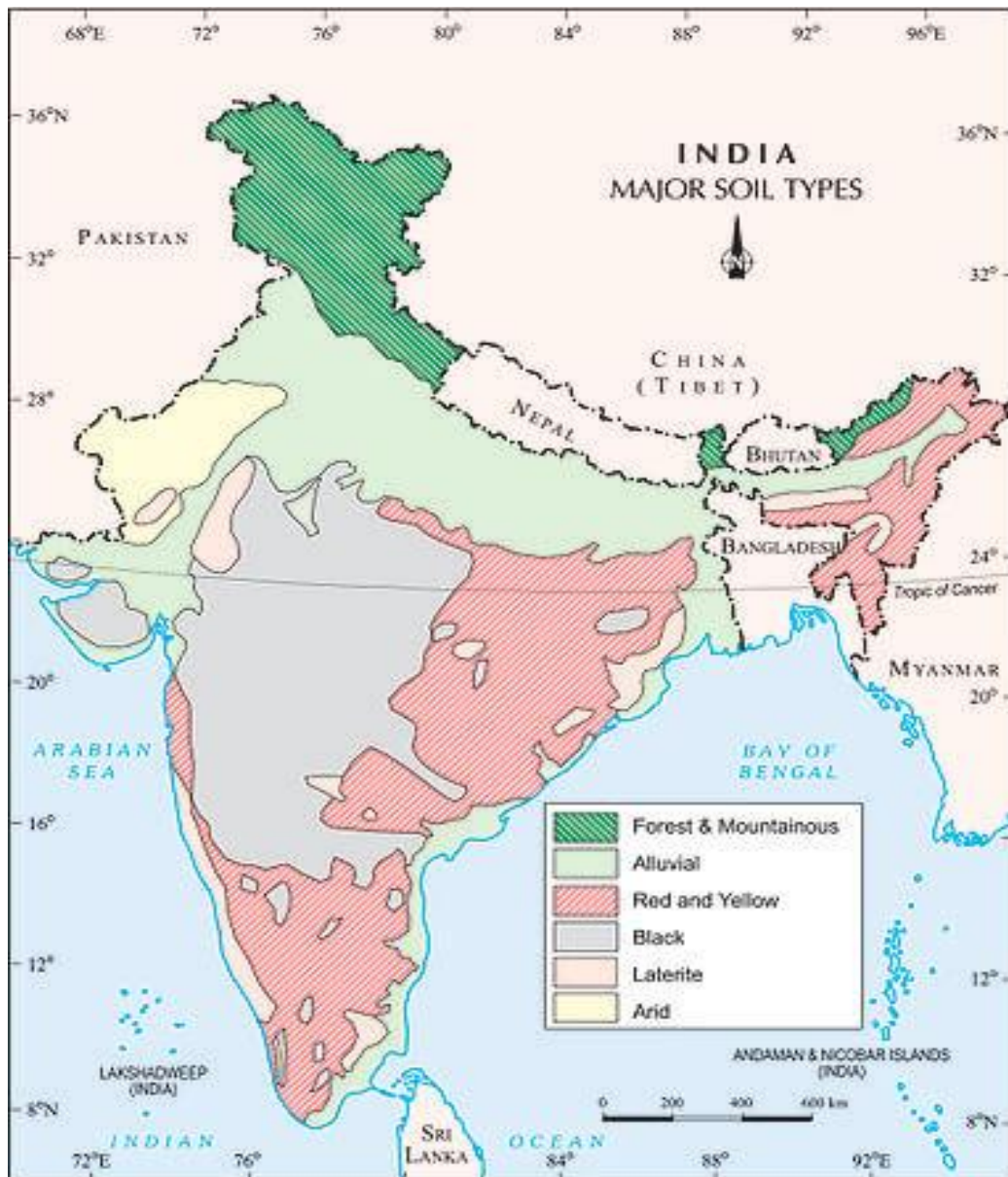
## Fifth Assignment

### Chapter – *Soil Resources*

### (**Red Soil** and **Laterite Soil**)

*(The following topics are for you to guide you to understand the Chapter)*

1. **Red Soil:-**
- a) How is it formed?
  - b) Where is it found?
  - c) Locate in the soil-map
  - d) Characteristics of **Red** soil
  - e) Crops grown in this soil
  - f) What is dry farming?



- 2. Laterite Soil:-**
- a) How is it formed?
  - b) Where is it found?
  - c) Locate in the soil-map
  - d) Characteristics of **Laterite soil**
  - e) Crops grown in this soil
  - g) Image of **Laterite soil** & **sugarcane**

***HOMEWORK:*** Write down in your Geography Homework Copy both the questions and the answers of the following questions.

- 1. How is Laterite Soil formed?
- 2. What do you understand by dry farming?
- 3. What are the characteristics of red Soil?

**NOTE:-** *These questions are only for HOMEWORK. You are expected to answer any question asked from this chapter. So, learn thoroughly.*

(Please see the next pages to go through the text of the video)

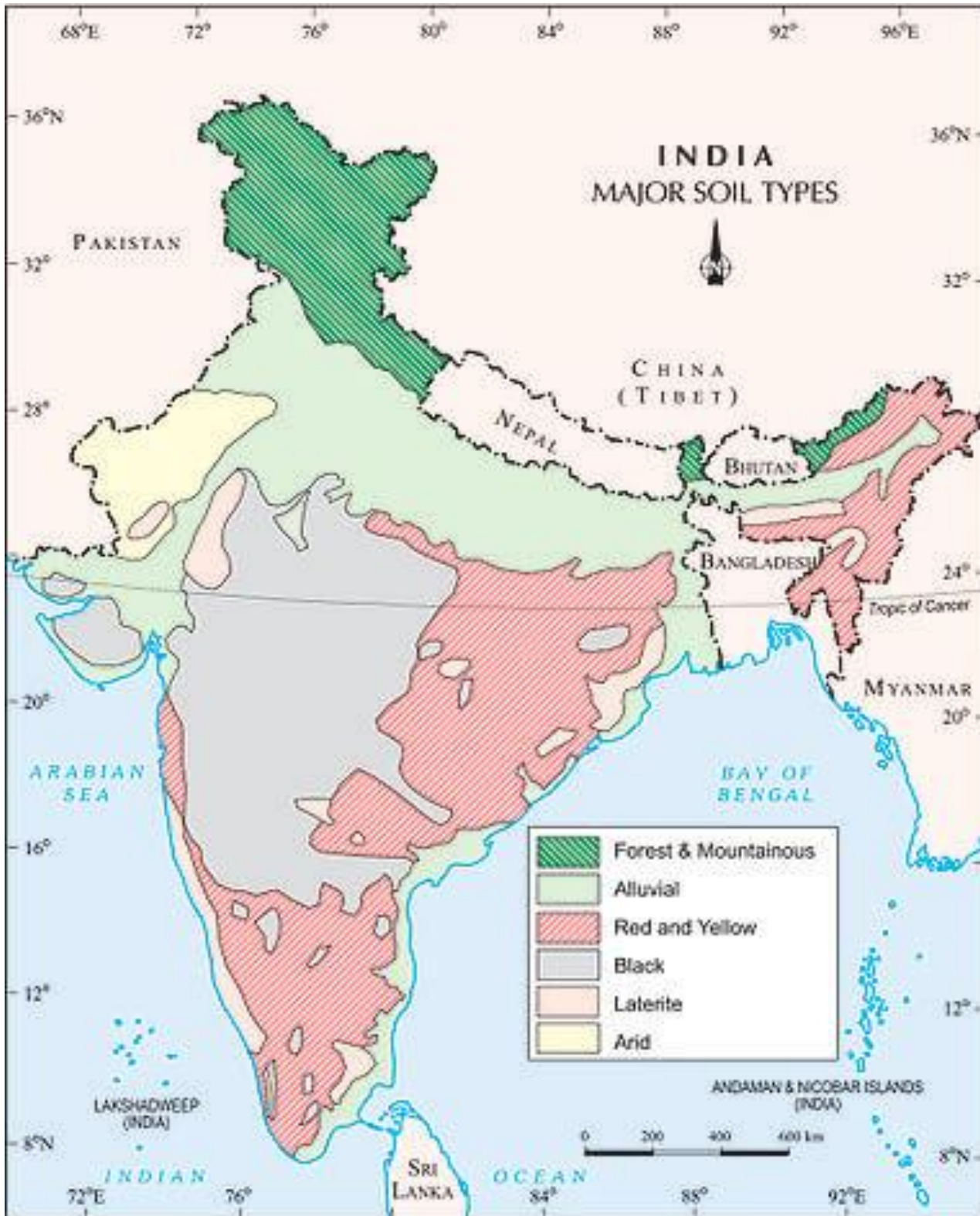
## *Red Soil & Laterite Soil*

### **How is *Red soil* formed?**

Red soil is formed by weathering of old crystalline igneous and metamorphic rocks. It is rich in iron oxide and hence appears red in colour.

## Where is the *Red soil* found in India?

- + These soils mostly occur in the regions of low rainfall like Deccan Plateau.
- + These soils are spread on almost the whole of Tamil Nadu.
- + Other regions with red soil include parts of Karnataka, south-east of Maharashtra, Telangana, Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, Chota Nagpur plateau.
- + Parts of south Bihar, West Bengal, Uttar Pradesh; Aravalis and the eastern half of Rajasthan (Mewar or Marwar Plateau), parts of North-Eastern states.



## ***Characteristics of Red Soil***

- ✚ The texture of these soils can vary from sand to clay, the majority being loams.
- ✚ On the uplands, the red soils are poor, gravelly, and porous. But in the lower areas they are rich, deep dark and fertile.

## ***Chemical composition of Red Soil***

- They are **poor** in lime, magnesia, phosphates, nitrogen and humus.
- They are fairly **rich** in potash and potassium.

## **Colour of the Red Soil**

- ❖ The red colour is due to the presence of **iron oxide**.
- ❖ In oxidizing conditions, rust or iron oxide develops in the clay, when the soil is present above the water table giving the soil a characteristic.

## **Crops grown in Red Soil**

Red soil is infertile but with proper doses of fertilizers and irrigation the red soils can give excellent yields of cotton, wheat, rice, pulses, millets, tobacco, oilseeds, oilseeds, potato, maize, groundnut and orchards.

*Dry farming is also suitable in Red Soil*

### **Dry farming**

A type of farming that is adopted in certain regions of inadequate rainfall where irrigation facilities are not available by conserving moisture in the soil by planting drought-resistant crops or by employing moisture-enhancing techniques. Its productivity can be increased by with regular use of fertilizers.





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*Red Soil and Crop (Maize)*

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## ***Laterite Soil***

### ***How is Laterite soil formed?***

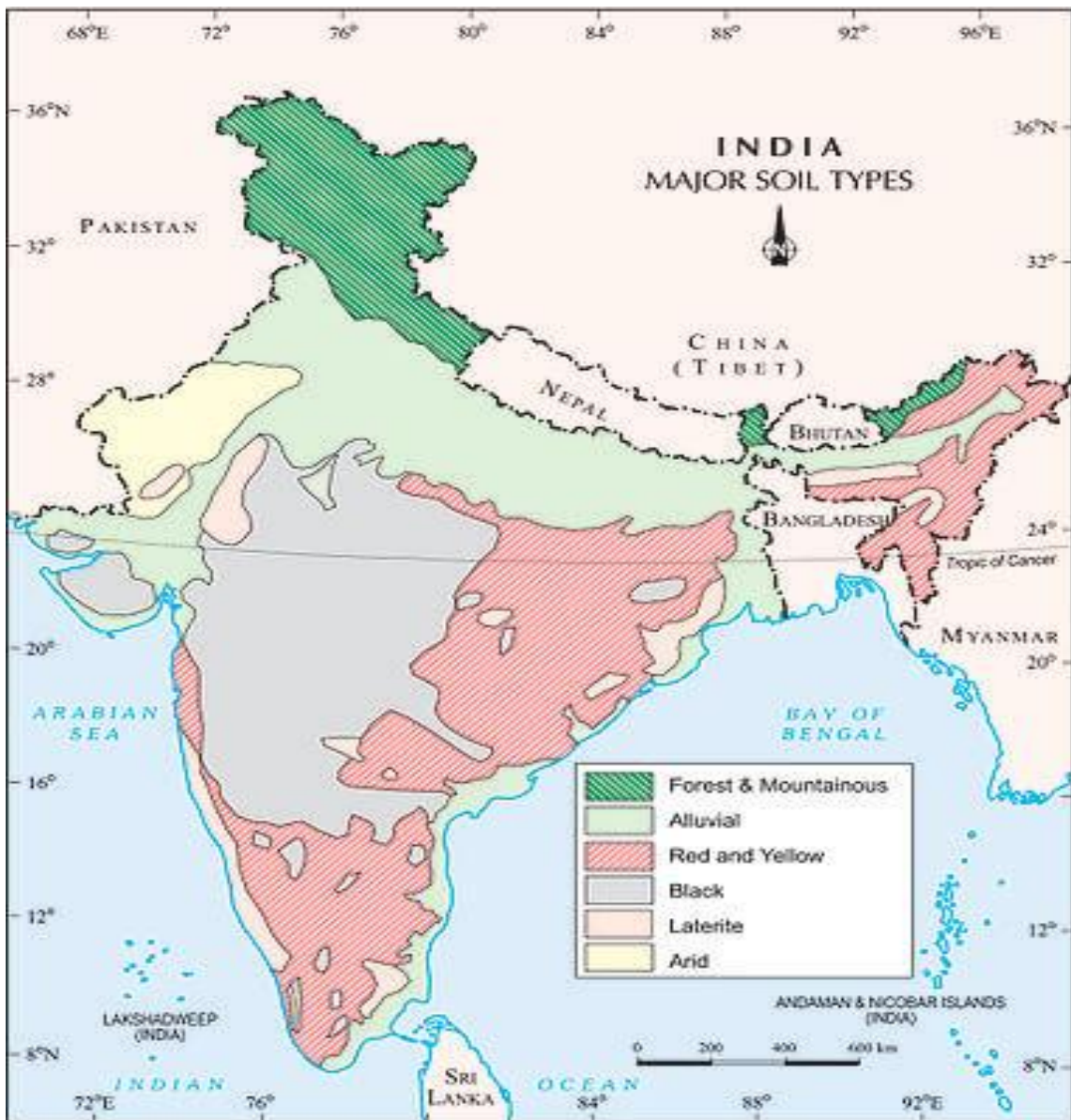
**The word ‘laterite’ has been derived from a Latin word meaning ‘brick’. Laterite soil is formed under conditions of heavy rainfall with alternate wet and dry periods, and high temperature which leads to leaching of soil, leaving only oxides of aluminum and iron.**

### **Where is the Laterite Soil found in India?**

- Laterite soils are mainly found on the summits of Western Ghats, Eastern Ghats, the Rajamahar Hills, Vindhya, Satpuras and Malwa Plateau.**
- They also occur at lower levels and in valleys in several other parts of the country. They are well developed in**



south Maharashtra, parts of Karnataka, Andhra Pradesh, Orissa, West Bengal, Kerala, Jharkhand, Assam and Meghalaya.



Soil Map of India

## *Characteristics of Laterite Soil*

- Formed as a result of high **leaching**.
- Laterite soil cannot retain **moisture**.
- It has high content of **acidity**.
- Lime and silica will be leached away from the soil.
- **Organic matters** are removed fast by the bacteria.
- **Humus content** is low.
- **Rich in:** Iron and Aluminum
- **Deficient in:** Nitrogen, Potash, Potassium, Lime, Humus

- **Colour:** Red colour due to iron oxide.
- **Yet,** fitting irrigation and proper use of fertilizers make it suitable for growing crops.
- The soil is one of the important sources for **building material**.

## Crops grown in *Laterite Soil*

- ❖ Though this soil is **not so fertile**, it suits to grow some special crops like **tapioca**, **cashew nut** etc.
- ❖ However by using irrigation and fertilizers some plantation crops like coffee, tea, rubber, coconut, rice, ragi, **sugarcane** etc are grown.



***Laterite Soil and Crop*** (sugarcane)