

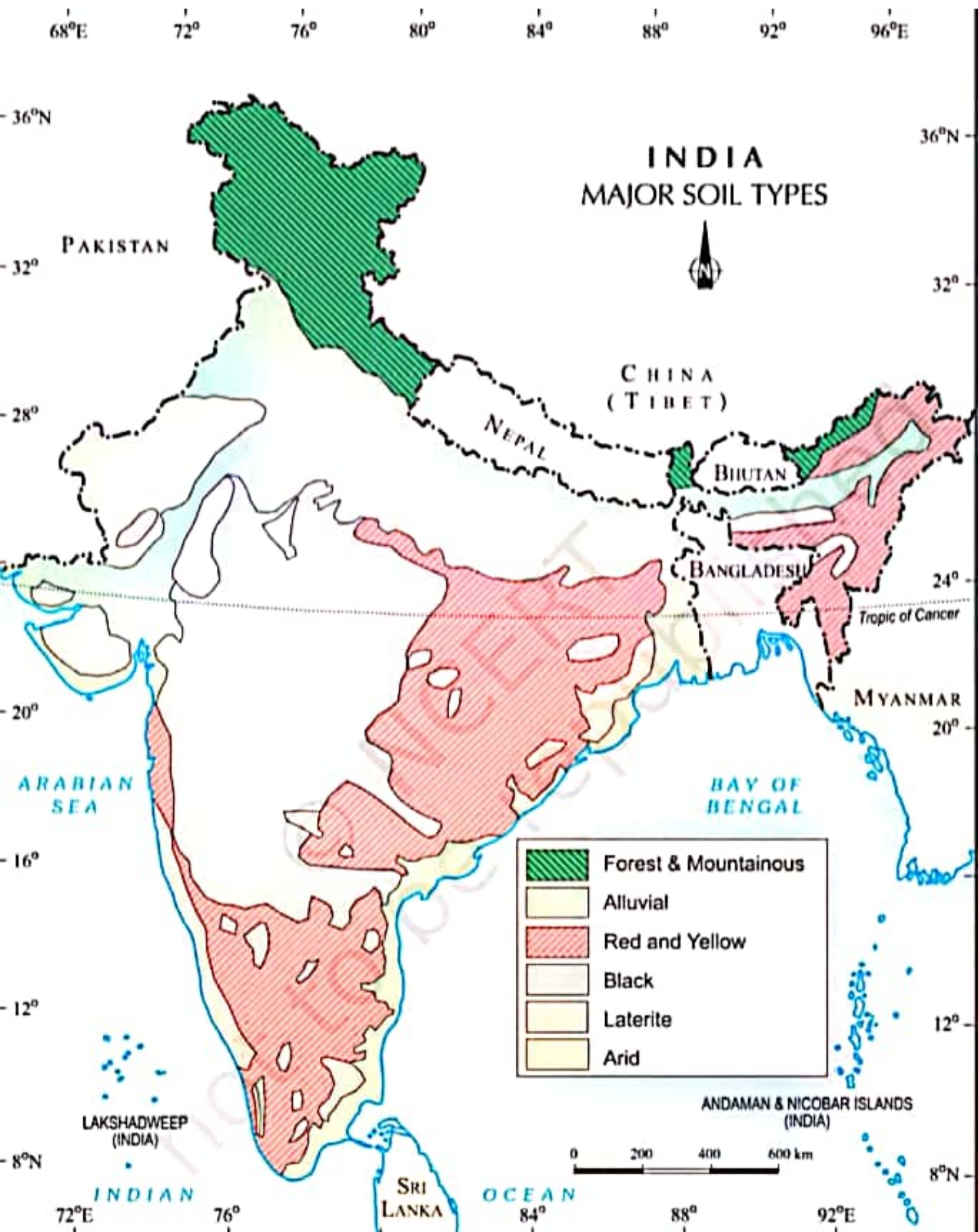


# SOIL

- The upper most layer of the earth's crust which is loose , broken and useful for plants is called soil.
- Soil is formed mainly due to the process of weathering. As a result of weathering a layer of loose rock materials is formed on the land surface.

# SOIL AS A RESOURCE

- Man depends on the soil directly or indirectly for his food.
- Agriculture can be practiced only if soils are available.
- Man gets the materials needed for shelter and clothing directly (or) indirectly from the soil.
- Soils are essential for the growth of forests.





# Classification of soils ;

- ☐ *Alluvial soil*
- ☐ *Black soil*
- ☐ *Red and Yellow soil*
- ☐ *Laterite soil*
- ☐ *Arid soil*
- ☐ *Forest soils*

# Alluvial soil;

- *Most widely spread and important soil.*
- *Consists of various proportions of sand and silt.*
- *In the upper reaches of the river valley i.e. near the place of break of slope, the soils are coarse*
- *These soils are very fertile*
- *Contains potash phosphoric acid and lime which are ideal for the growth of sugarcane, paddy, wheat etc.*
- *Regions of alluvial soil are intensively cultivated and densely populated*
- *Alluvial soils in the drier areas are more alkaline*





# Black soil;

- *Black in colour and also called Regar soils.*
- *Ideal for growing cotton and also known as black cotton soil.*
- *Made up of extremely fine and clayey material.*
- *Well known for their capacity to hold moisture.*
- *Rich in soil nutrients such as calcium carbonate, magnesium, potash and lime. Generally poor in phosphoric content.*
- *These soils develop deep cracks during hot weather, which helps in proper aeration.*



# Red and Yellow soil;



- *These soils develop a reddish colour due to diffusion of iron in crystalline and metamorphic rocks.*
- *It looks yellow when it occurs in hydrated form.*
- *It develops on crystalline igneous rocks.*



RED SOIL



YELLOW SOIL





# Laterite soil;



- *This soil develop under tropical and sub- tropical climate with alternate wet and dry seasons.*
- *This soil is a result of intense leaching due to heavy rain.*
- *It is humus rich, but under sparse vegetation and semi arid environment.*
- *They are prone to degradation and erosion due to their position on the landscape.*





# Arid soil;

- *Generally sandy in texture and saline in nature.*
- *Due to dry climate, high temperature, evaporation is faster and the soil lacks humus and moisture.*
- *Lower horizon of soil are occupied by Kankar because of the increasing calcium content downwards.*
- *Kankar layer formations in the lower horizon restrict infiltration of water.*

