Geography – Std.10

Fourth Assignment

Chapter – *Soil Resources*

(Alluvial Soil and Black Soil)

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

1. **Alluvial Soil :-**
   - **a) How is it formed?**
   - **b) Three types of alluvial soil**
   - **c) Where is it found?**
   - **d) Locate in the soil-map**
   - **e) Characteristics of alluvial soil**
   - **f) Crops grown in this soil**
   - **g) Bhangar? Khadar? Differences?**

2. **Black Soil :-**
   - **a) How is it formed?**
   - **b) Where is it found?**
   - **c) Locate in the soil-map**
   - **d) Characteristics of black soil**
   - **e) Dry Farming**
   - **f) Crops grown in this soil**
   - **g) Images of Black soil & cotton**

HOMEWORK:-

Write down in your Geography Homework Copy both the questions and the answers of the above topics.

1. **How is Black Soil formed?**
2. **What are the characteristics of Alluvial Soil?**
3. **Distinguish between Bhangar and Khadar.**

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)

Chapter - *SOIL RESOURCES*

Major types of Soil found in India

Alluvial Soil & Black Soil

In this session we shall discuss in details how are they formed, where are they found (regions), what are their unique characteristics, which are the crops that grow well in them etc.

Alluvial Soil

How is Alluvial soil formed?

Alluvial soil is formed by accumulated sediments transferred by the rivers and rapids, thus, it is amongst the most fertile soils. It is a fine-grained fertile soil deposited in river beds or by water flowing over flood plains. They generally lack humus and nitrogen. It covers about forty percent of India's total land area.

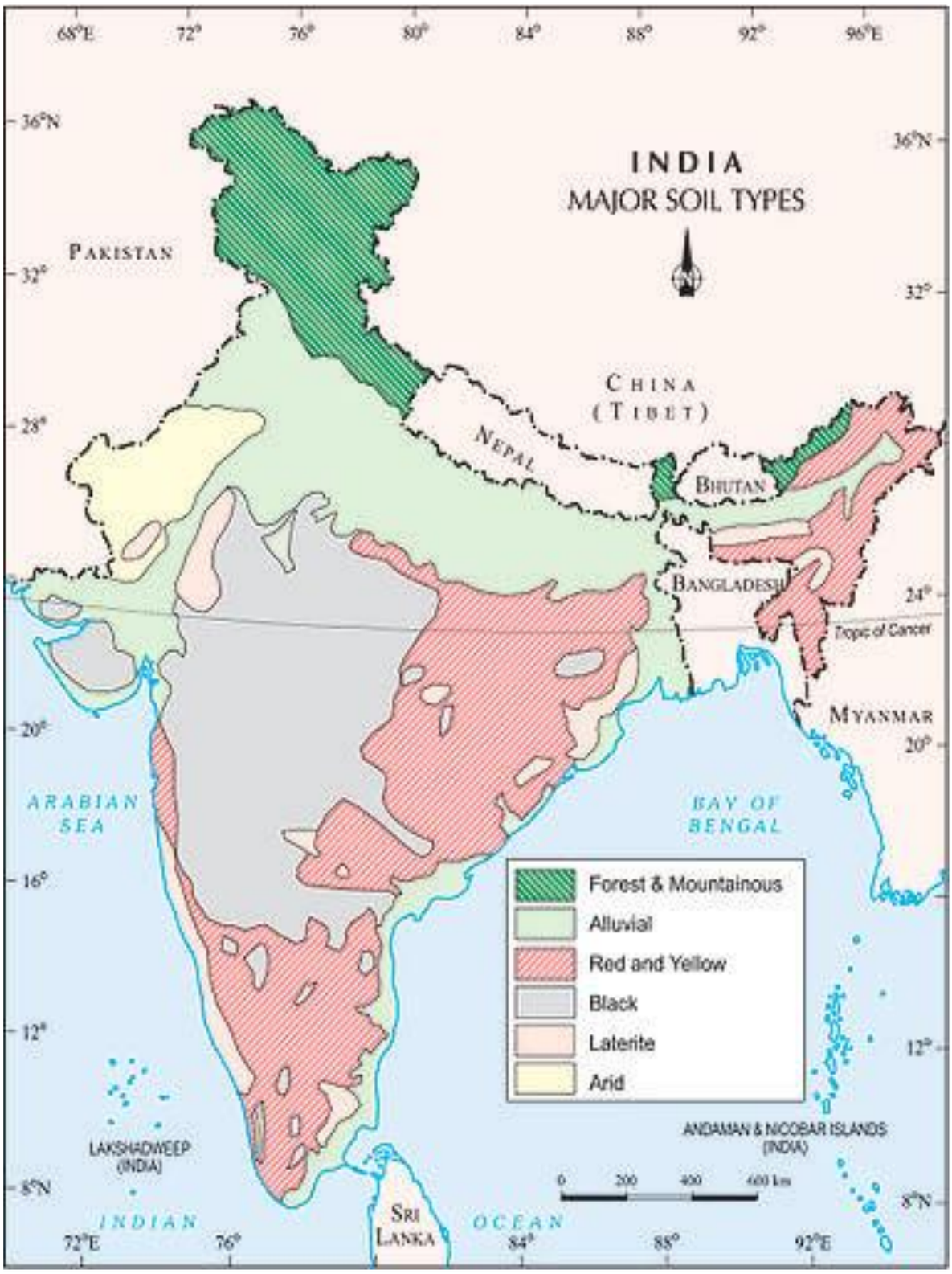
Three types of Alluvial Soil in India

a) **The deltaic alluvium**
b) **The coastal alluvium**
c) **The inland alluvium**

Where is alluvial soil found in India?

Alluvial soils are scattered throughout the country and is the most widespread category. They form around the lower courses of most rivers around the country and particularly all over the *Indo-Gangetic Plain* in Punjab,

Haryana, Uttar Pradesh, Bihar, West Bengal, Assam, Odisha, Tamil Nadu Gujarat, parts of Rajasthan and Madhya Pradesh.



Characteristics of Alluvial Soil

- Mostly available soil in India (about 40%).
- Widespread in northern plains and river valleys.

- In peninsular-India, they are mostly found in deltas and estuaries.
- Humus, lime and organic matters are present.
- Highly fertile.
- They are depositional soil – transported and deposited by rivers, streams etc.
- New alluvium is termed as Khadar and old alluvium is termed as Bhangar.
- **Colour:** Light Grey to Ash Grey.
- **Texture:** Sandy to silty loam or clay.
- **Rich in**: potash
- **Poor in**: phosphorous.

Crops grown in Alluvium Soil

Wheat, rice, maize, sugarcane, cotton, jute, pulses, oilseed etc are cultivated mainly.

What is Bhangar?

Bhangar is the alluvial soil found in the large part of North India. This is an old soil which is alluvial in nature and is above the flood levels of the rivers in the region. It is often seen in the structure of a terrace. Bhangar contains many calcareous deposits and also has many kankars within it.

What is Khadar?

In the plains, the younger deposits are known as Khadar. These are more fertile than Bhangar soils. These soils are very good for intensive cultivation. These are also called new alluvial made up of fine granules.

What is the Difference between Bhangar and Khadar?

Bhangar vs Khadar

More Information Online WWW.DIFFERENCEBETWEEN.COM

	Bhangar	Khadar
DEFINITION	Old alluvial deposits in northern plains	New or fresh alluvial deposits in northern plains
STABILITY OF DEPOSITS	Stable	Not stable since it always flows with water
LOCATION	Little away from the river bed	Near the river bed
FERTILITY	Less fertile than Khadar	More fertile than Bhangar
RENEWAL OF THE DEPOSIT	Does not renew	Renews every year
SUITABILITY FOR EXTENSIVE AGRICULTURAL ACTIVITIES	Less suitable	More suitable
CONCENTRATION OF KANKAR MODULES ON CALCIUM CARBONATE	Higher	Lesser
TEXTURE	Fine	Coarse

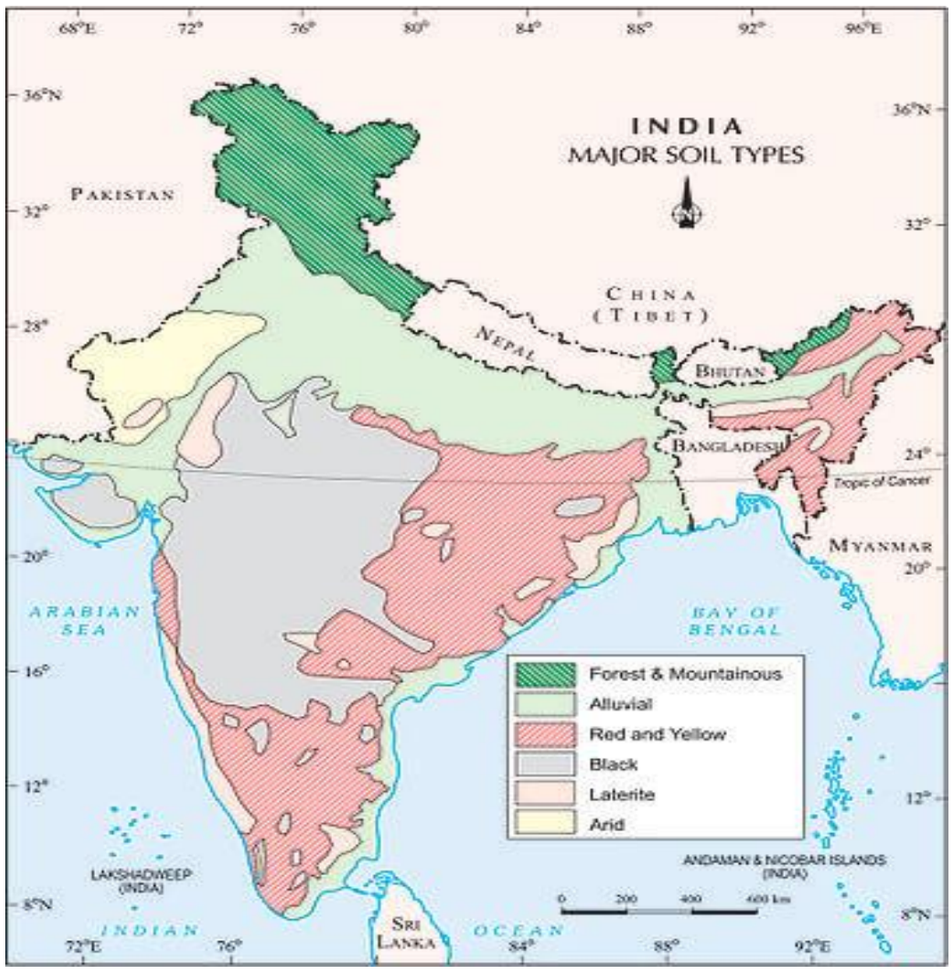
Black Soil

How is Black soil formed?

Black soil is formed by the weathering or breaking of igneous rocks and also by the cooling or solidification of lava from the volcano eruption. Therefore, it is also called as the *lava soil*. These soils are black in colour and are also known as *regur soil*. Since black soil is ideal for growing cotton, it is also known as black *cotton soil.*

Where is *Black soil* found in India?

Black soil is most abundantly found in the Deccan Trap (Basalt) region spread over northwest Deccan plateau. They cover the plateaus of Maharashtra, Saurashtra, Malwa, Madhya Pradesh, Chhattisgarh and extended in the South East direction along the Godavari and the Krishna Valleys.



Characteristics of ***Black*** *Soil*

- **Regur means cotton – best soil for cotton cultivation.**
- **Most of the Deccan is occupied by Black soil.**
- **Mature soil.**
- **High water retaining capacity.**
- **Swells and will become sticky when wet and shrink when dried.**
- **Self-ploughing is a characteristic of the black soil as it develops wide cracks when dried.**
- **Rich in: Iron, lime, calcium, potassium, aluminum and magnesium.**
- **Deficient in: Nitrogen, Phosphorous and organic matter.**
- **Colour: Deep black to light black.**
- **Texture: Clayey.**

Crops grown in *Black* Soil

Black soil is ideally suited for growing tobacco, wheat, millets, oilseed crops, citrus fruits, vegetables, sugar cane, in addition to cotton. The retentiveness to moisture makes them ideal for dry farming.

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.

Black Soil and Crop (Cotton)