

Different Types of Soils Found in India

Types of Soils found in India

According to the [National Council of Agricultural Research](#), soils found in India are classified into the following categories :

- (i) Alluvial Soil,
- (ii) Red Soil,
- (iii) Laterite Soil,
- (iv) Forest Soil
- (v) Saline and Alkaline Soils,
- (vi) Arid and Desert Soils, and
- (vii) Black Soils.

Alluvial Soil

1. It is the most important type of soil found in India.
2. This type of soil covers almost a quarter of India's land surface.
3. This type of soil is composed of sediments deposited by rivers in the plains and sea in the coastal areas.
4. Alluvial soils are mostly found in Northern plains running from Punjab in the west to West Bengal and Assam in the East. It is also found in Narmada and Tapti valleys in Madhya Pradesh and Gujarat, Mahanadi valley in Chhattisgarh and Odisha, Godavari valley in Andhra Pradesh and Cauvery valley in Tamil Nadu.
5. Alluvial soils are deficient in nitrogen and humus therefore it requires fertilisation.
6. The fine particles of sand, silt and clay are called alluvium.
7. The alluvial soil can be divided into old alluvium (**bangar**) and new alluvium (**khadar**).
8. The khadar soil is sandy and light in colour, while the bhanganar soil is clayey and dark.
9. The khadar soil is more fertile than the bangar soil.
10. Alluvial soils are suitable for production of crops of rice, wheat, maize, sugar cane, tobacco, cotton, jute, oilseeds, etc.

Red Soil

1. The red soil occupies about 10 per cent area of India.
2. The red soil occurs mostly in the south-eastern peninsula. It is mainly found in Tamil Nadu, parts of Karnataka, south-east Maharashtra, parts of Andhra Pradesh, Madhya Pradesh, Orissa and Jharkhand.
3. The soil is made up of crystalline and metamorphic rocks.

4. It is rich in ferromanganese minerals and soluble salts but is deficient in nitrogen and humus and hence needs fertilisation.
5. The colour of the soil is **red** due to the high percentage of iron contents.
6. Red soil has a light texture and a porous structure.
7. Red soil is most suitable for the production of rice, ragi, cotton, tobacco, pulses etc.

Laterite Soil

1. Laterite soil is found in areas of high rainfall and temperature with alternate dry and wet periods.
2. The laterite soil is widely spread in India and is mainly found in the high reaches of the Western Ghats, Eastern Ghats, Rajmahal Hills, Vindhyas, Satpuras and Malwa plateau. It is also found in parts of Karnataka, Andhra Pradesh, Kerala, Odisha and West Bengal.
3. It contains high content of iron oxides but is deficient in nitrogen.
4. The laterite soil is **red** in colour and composed of gravel of red sandstones and clay.
5. This soil is suitable for producing plantation crops like tea, coffee, rubber, coconut, ragi, etc.

Forest Soil

1. Forest soils are found in the Himalayas and other mountain regions of the north.
2. These soils are very shallow, stony, and infertile for the production of field crops. However, this type of soil is useful for forest produce such as timber, tropical fruits and fuel.

Saline and Alkaline Soils

1. Saline and Alkaline soils are found in the arid and semi-arid parts of Rajasthan, Punjab, Haryana, Uttar Pradesh and Bihar.
2. These soils are characterised by white incrustation of salts of calcium, magnesium and sodium on the surface.
3. These soils are known by different names such as '**reh**', '**usar**', '**kallar**', '**chopan**', etc.
4. Accumulation of salt makes this soil infertile and unsuitable for agricultural production.

Arid and Desert Soils

1. The arid and semi-arid regions of north-west India receiving less than 50 cm of annual rainfall have this type of soil. It is largely found in Rajasthan, parts of Haryana and Punjab and extends up to the Rann of Kutch in Gujarat.
2. These types of soils are deficient in nitrogen but have high content of phosphates. It is infertile but its fertility can be improved by adding lime or gypsum.
3. This soil is suitable for production of crops such as wheat, tobacco, millets, barley, maize, pulses, cotton, etc.

Black Soils

1. Black soil is found largely in the Deccan Plateau covering large areas of Maharashtra, Gujarat and western Madhya Pradesh. It is also found in Karnataka, Andhra Pradesh and Tamil Nadu.
2. It is called Black Cotton soil because it is suitable for cultivation of cotton. In some areas, it is also known as 'regur'.
3. The colour of the soil is **black** due to the presence of compound of iron and aluminium.
4. This soil is rich in calcium carbonate, magnesium carbonate, potash and lime, but deficient in nitrogen.
5. Black soil is suitable for cultivation of cotton, wheat, linseed, millets, tobacco and oilseeds.

See also: Objective questions on [Types of Soils found in India](#)