

Geography of Bihar



बिहार का भूगोल

CLIMATE AND SOIL of Bihar





HELLO!



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CLIMATE AND SOIL of Bihar





- **CLIMATE OF BIHAR**
 - THE HOT WEATHER SEASON
 - THE SOUTH-WEST MONSOON
 - THE SEASON OF RETREATING MONSOON
 - THE COLD WEATHER
- **SOIL OF BIHAR**
 - SOILS OF NORTHERN PLAIN
 - PEIDMENT SWAMP SOIL
 - TERAJ SOIL
 - THE GANGETIC ALLUVIUM SOIL
 - SOILS OF SOUHTERN PLAIN
 - KARAIL-KEWAL SOIL



- TAL SOIL
- BALTHAR SOIL
- SOILS OF SOUTHERN PLAIN
- RED AND YELLOW SOILS
- RED SANDY SOILS
-



SOIL OF BIHAR

- Soil is the mixture of minerals and organic components which are the basis of plants growth.
- Soil is formed from breakdown of parents rocks or physical and chemical changes(भौतिक और रासायनिक परिवर्तन) occurring in parents rocks.
- Climate also play important role in its formation.
- Variation in relief(राहत), precipitation(तेज़ी), vegetation and parents rocks have resulted in various types of soil.



- ❑ The soils of Bihar can be further divided into three types as follows
- ❑ **1. SOILS OF NORTHERN PLAIN**
- ❑ The soil here is the result of deposition (निक्षेप) of sediments (तलछट) brought by Gandak, Burhi Gandak, Mahananda, Kosi, and Saryu rivers.
- ❑ North plain soil can be classified into three types such as follows
- ❑ **(i) PIEDMONT SWAMP SOIL (दलदली मिट्टी)**
- ❑ This soil is found in North- Western part of West Champaran district.



- ❑ The soil is shallow to deep over bed rocks and pebbels(कंकड़).
- ❑ Excessive moisture(अत्यधिक नमी) due to annual rainfall and continuous seepage of water from the North has created this type of soil.
- ❑ This is mostly clayey, rich in organic matter and neural in reaction.
- ❑ This is brown to grey and supports good rice crop.
- ❑ **(ii) TERAI SOIL**



- This type of soil is found in Northern part in a narrow belt along the border of Nepal.
- This is grey to yellow in colour and neutral to moderately acidic (मामूली अम्लीय) in reaction.
- The lowland Terai soil is more fertile compared to upland Terai soil.
- In the lowland rice, sugarcane, jute, oilseeds grow while the uplands remain mostly barren with growth of mainly millet crops(बाजरा फासला).

(iii) THE GANGETIC ALLUVIUM SOIL



- ❑ This type of soil is mostly loamy (चिकनी बलुई मिट्टी) with varying thickness.
- ❑ It is thinner towards South and thicker towards north.
- ❑ Shifting of soil due to erosion and deposition (क्षरण और जमावट) has resulted.
- ❑ Further swampy condition (दलदल की स्थिति) due to water accumulation (संचय) and salt concentration due to leaching and evaporation in dry season are some problems.
- ❑ The accumulation of sodium and magnesium has resulted in Usar soil creation in



- Trihut, particularly in Siwan.
- The lime content is higher in the North of Ganga than in the South.
- Calcium carbonate is lesser in the East humid districts(आर्द्र जिलों).
- This soil is generally fertile(उपजाऊ) in Bihar plain but due to regular tillage without application of manure have resulted in low organic content.
- The river system of Bihar plain has a great influence on the character of soil.



- It is further divided into two types, these are Bhangar soil and Khadar soil.
- THE BHANGAR SOIL**
- This type of soil is found in uplands areas.
- It varies in texture and chemical composition(रासायनिक संरचना).
- It is mostly loamy with high clay factor.



- Kankar of carbonaceous compounds are abundant(प्रचुर).
- Its drainage is poor due to high clay concentration.
- This makes the soil sticky(चिपचिपी मिट्टी).
- The difficulty in its tillage makes it suitable for paddy cultivation(धान की खेती).
- It is rich in lime which makes it suitable for sugarcane cultivation.



THE KHADAR SOIL

- This type of soil is found in lowlands and in the vicinity(आस-पास) of rivers where fresh deposits renew it periodically(समय-समय).
- It is sandy in the upper reaches while silty in the lower section.
- The soil is less calcareous and carbonatic than Bhangar soil and has less kankar concentration.



- It is generally rich in nitrogen and is used for paddy cultivation.
- Surface of Khadar soil is level due to periodic deposition of silt(गाद का निक्षेप).
- Khadar soil is suitable for Bhadai and Rabi crops, sugarcane and root crops.
- 2. SOILS OF SOUTHERN PLAIN**
- The soil of Southern plain is found between North Ganga and Southern plateau.



Please refer these courses to your friends

कृपया इन पाठ्यक्रमों को अपने मित्रों को Share ...



- This is formed by alluvium deposited by Sone, Punpun, Falgu rivers etc.
- The soil is divided into the following types*
- (i) KARAIL-KEWAL SOIL**
- This is heavy clay soil.
- The soil is characteristic of wet paddy lands or dhanhar, spread over Rohtas to Gaya, Aurangabad, Patna, Jahanabad, Mungar and Bhagalpur.



- This is alkaline soil(क्षारीय मिट्टी).
- Kewal is clay and heavy clay loamy soil.
- This is acidic to alkaline in nature with brown to yellow in colour.
- This is highly balanced with high water absorption capacity (अवशोषण क्षमता)and highly fertile in nature.
- It is well suited for both of rice and rabi crops, such as wheat, linseed, pulses and gram.



(ii) TAL SOIL

- This is spread from Buxar to Banka district.
- This is situated in backwater belt of the Ganga.
- The area remains under water for months together during rainy season due to accumulation(संचय) of rain water and poor drainage.



- Its width varies from 8 to 10 km.
- The Tal soil varies in colour from light grey to dark grey and in texture (बनावट) from medium to heavy soil.
- This is neutral to slightly alkaline in reaction having pH between 7 to 8.
- Due to accumulation of water for considerable period of time, Kharif or monsoon crops cannot be grown.



- Rabi or spring crops like wheat, Khesari, gram, peas, masoor, lentiles etc are harvested after water dries up their yield in quite high.

- (iii) BALTHAR SOIL**
- This is red and yellow in colour.

- It is developed between Chhotanagpur plateau and South Ganga plain transitional zone.

- It is found in Kaimur plateau to Rajmahal hills in narrow belt.



- It is less fertile and has water absorption capacity(अवशोषण क्षमता).
- Maize(मक्का), jower, bajra, gram, are chief crops.
- Due to iron presence, the soil is red in colour.
- 3. SOILS OF SOUTHERN PLATEAU**
- The soils of Southern plateau are divided into two types.
- (i) RED AND YELLOW SOILS**



- ❑ These soils have been formed from disintegration(विघटन) of igneous(आग्नेय) and metamorphosed (रूपान्तरित) rocks.
- ❑ Due to presence of iron in the rocks, their colour is red.
- ❑ They are less fertile and thus suitable for coarse crops and pulses.
- ❑ Area of occurrence(घटना) comprises Banka, Nawada, Gaya, Aurangabad, Jamui, and Munger.



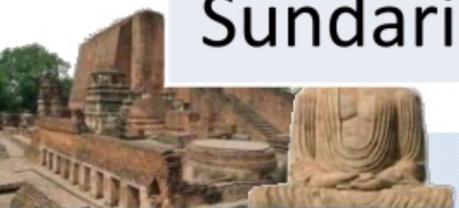
(ii) RED SANDY SOIL

The soil is found in Kaimur and Rohtas districts.

Higher percentage of sand(रेत) results in lesser fertility thus suitable only for bajra, jowar etc, crops.



Types of Soil	District	Crops	Chemical and physical properties
Balthar	Kaimur	Jowar, bajra, arhar	Sandy, calcareous, yellow
Tal	Patna, Munger	Pulses, oilseeds, Wheat	Heavy Soil
Terai	Champanan, kishanganj	Sugarcane, jute, Rice	Sandy and calcareous, brown and light yellow
Bhangar	Patna, gaya , Rohtas	Jute, Sugarcane, Arhar	Acidic, rich in lime
Khadar	Muzaffarpur, purnia, Saharsa, darbhanga, Bhagalpur	Wheat, Rice, Gram, Maize	Dark brown fertile
Bal Sundari	Saharsa, East and west Champanan	Sugarcane, wheat, maize, Tobacco	Lime, Alkaline



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