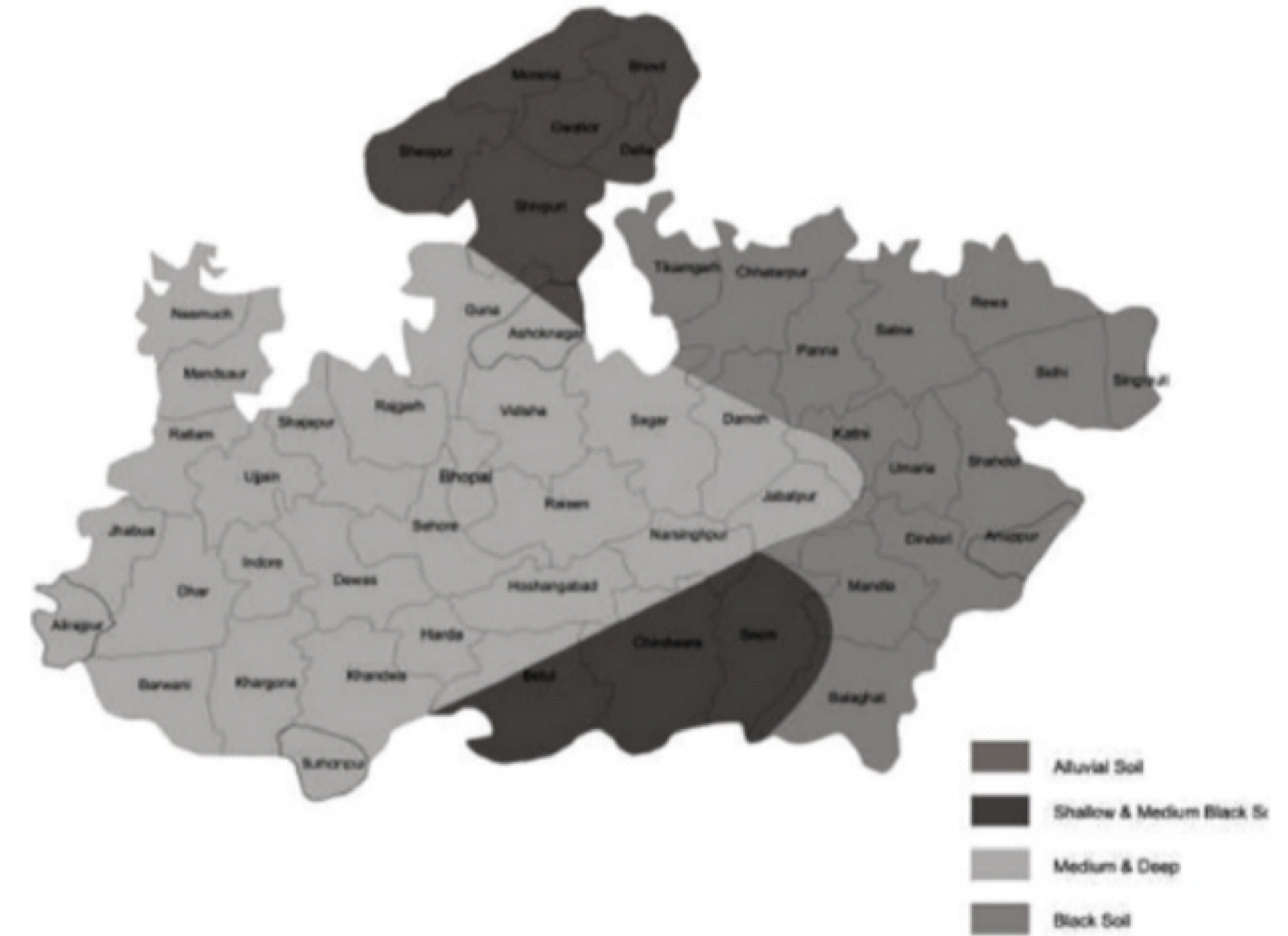


# Soil in Madhya Pradesh

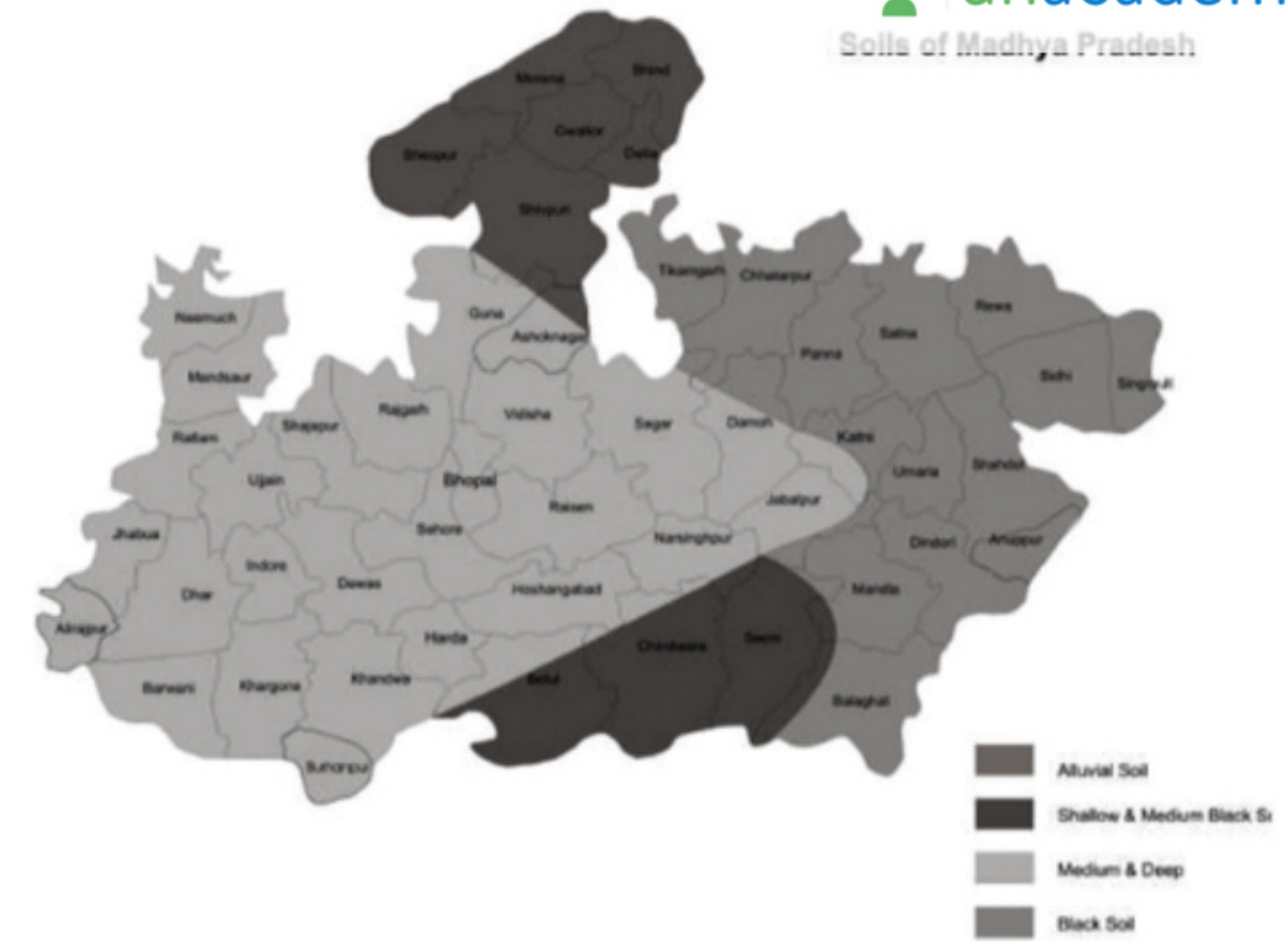
# General Introduction

- Soil Formation is called Pedogenesis.
- Upper most Weathered layer of the earth crust is called soil.
- Soil decides the natural vegetation and agriculture of a region.
- Soil acidity – It is the degree of acidity measured on PH Scale.
- Soils of Madhya Pradesh vary as per the structure, color, texture and composition in the different geographical regions of the state.
- Madhya Pradesh part of the peninsular plateau of India rock formation determines the soil structure and composition in this state.





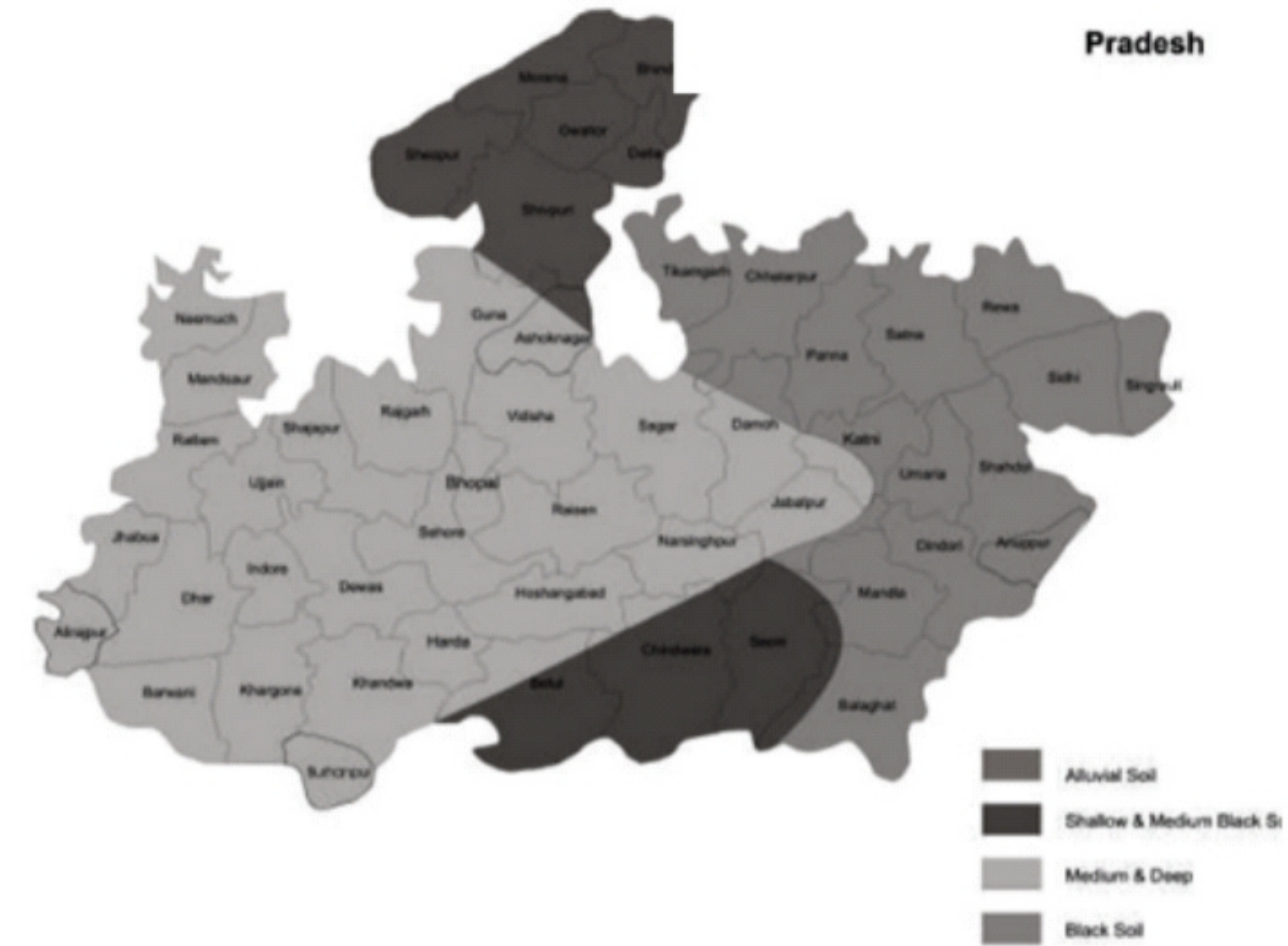
- Black soil is mainly suited for cotton, wheat and soyabean.
- This is found in the largest part of land of Madhya Pradesh that is around 47% of the total area of MP.
- It is found in Malwa plateau and parts of Satpura and Narmada Valley.
- In terms of districts it is found in Mandsaur, Ratlam, Jhabua, Dhar, Khandwa, Khargone, Indore, Dewas, Ujjain, Rajgarh, Bhopal, Raisen, Vidisha, Sagar, Damoh, Jabalpur, Narsinghpur, Hoshangabad, Betul, Chhindwara, Seoni, Guna, Shivpuri and Sidhi.



Based on colour and its profile black soil can be further classified into;

## Dark \ Black Soil

- This subtype of black soil is mainly found in areas of Narmada-Soil valley and Malwa-Satpura Range.
- Fertility is low. It is suitable for cultivation of wheat, oil seeds, gram and jowar. Approx. 3.5% of Black Soil is Dark Black Soil



## Normal Black Soil

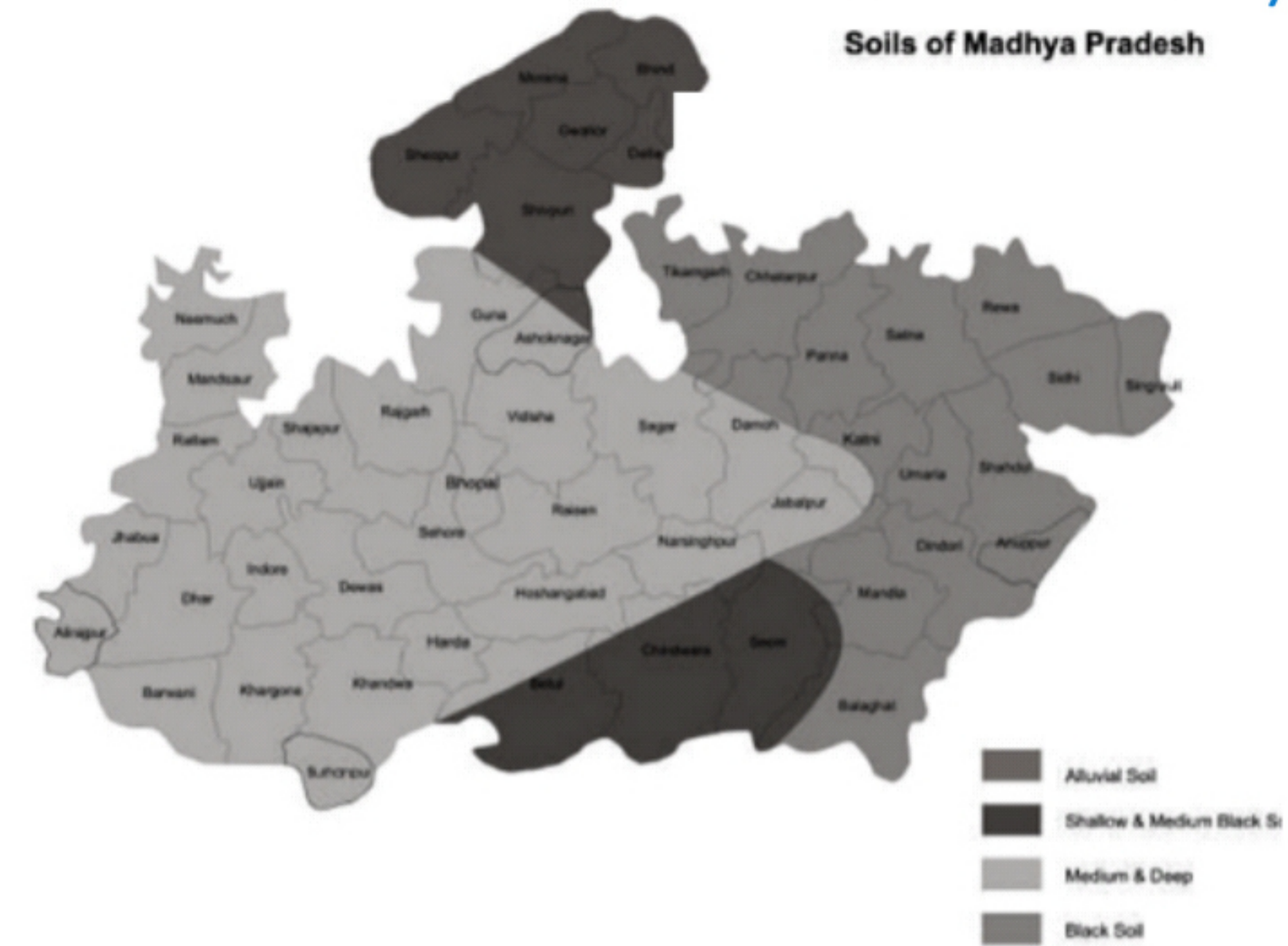
- Cover the portion of Malwa Plateau.
- Approx 37% of black soil is Normal Black Soil.

## Layered Black Soil

- Mainly found in the region of Chhindwara, Betul & seoni.
- suitable for cultivation. Approx 7.1% of black soil is layered black soil.

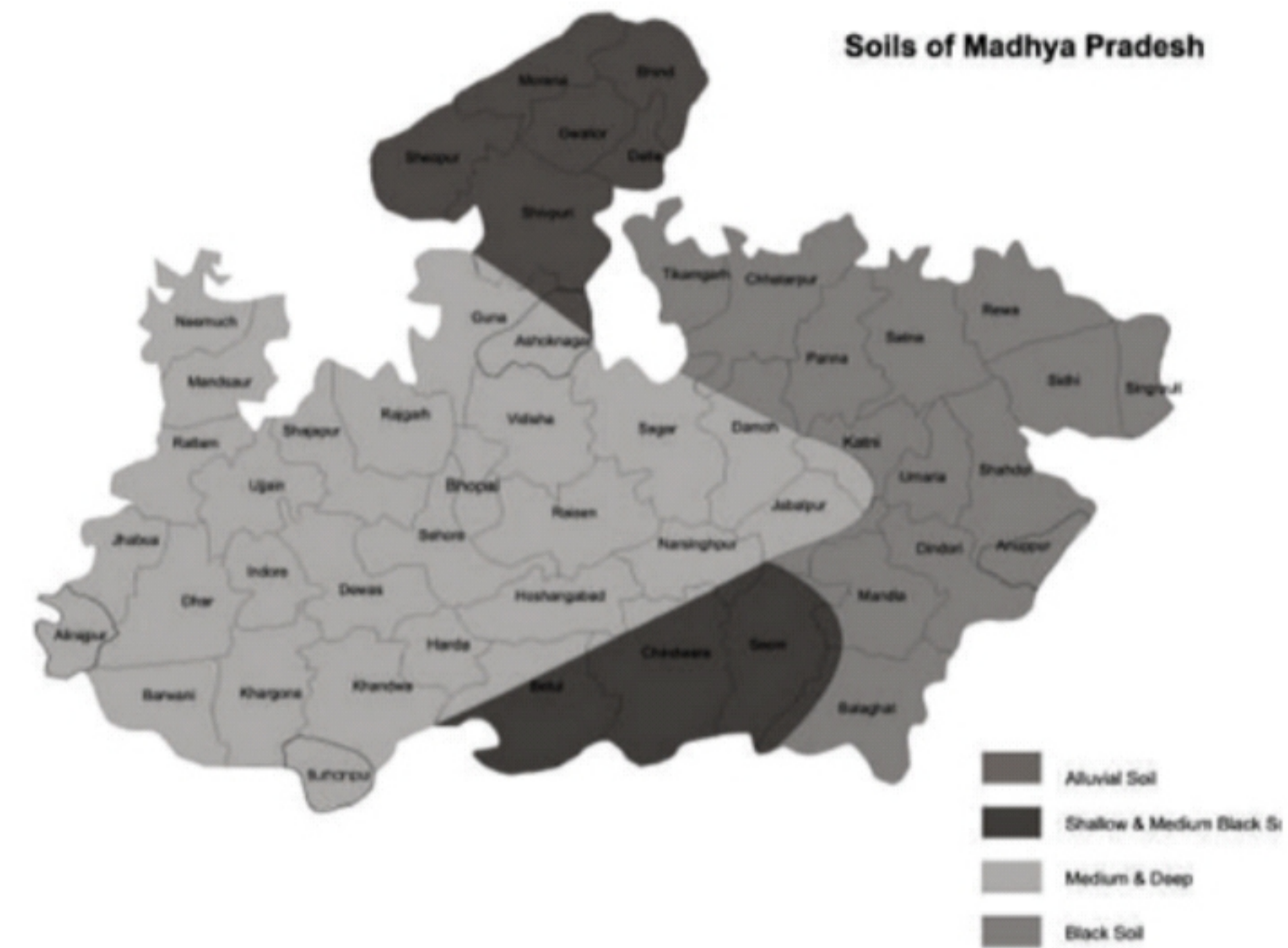
## Alluvial Soil

- In general, the alluvial soil is widespread in the northern plains and the river valleys.
- They are the depositional soils transported and deposited by the rivers and streams.
- They vary in nature from place to place from sandy loam to clay. Rich in potash but poor in phosphorus.
- Found - North-Western districts of MP, mainly found in plains of Bundelkhand and Chambal region.
- In terms of districts it is mainly found in Morena, Bhind, Gwalior and Shivpuri.
- it is found in around 3% area of MP. It is considered suitable for wheat, sugarcane and mustard



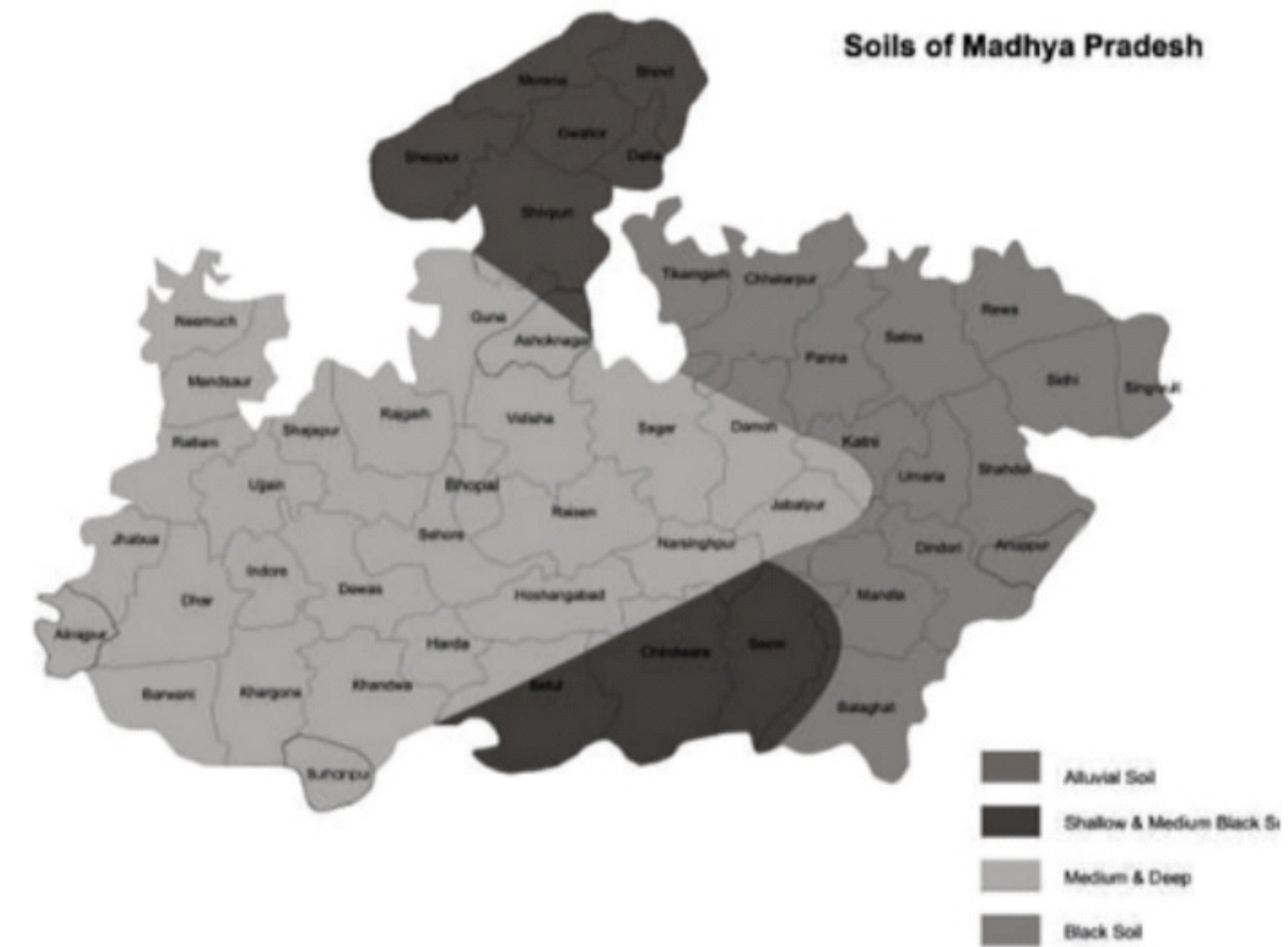
## Mixed Soil

- Black soil, red soil and yellow soil together constitute mixed soil.
- Mixed soil is mostly found in the Vindhya region and in small quantities in many areas of Madhya Pradesh.
- Mixed Soil lacks in phosphate, nitrogen and organic substances and thus it is relatively less fertile.
- Maize and jowar are grown on it.



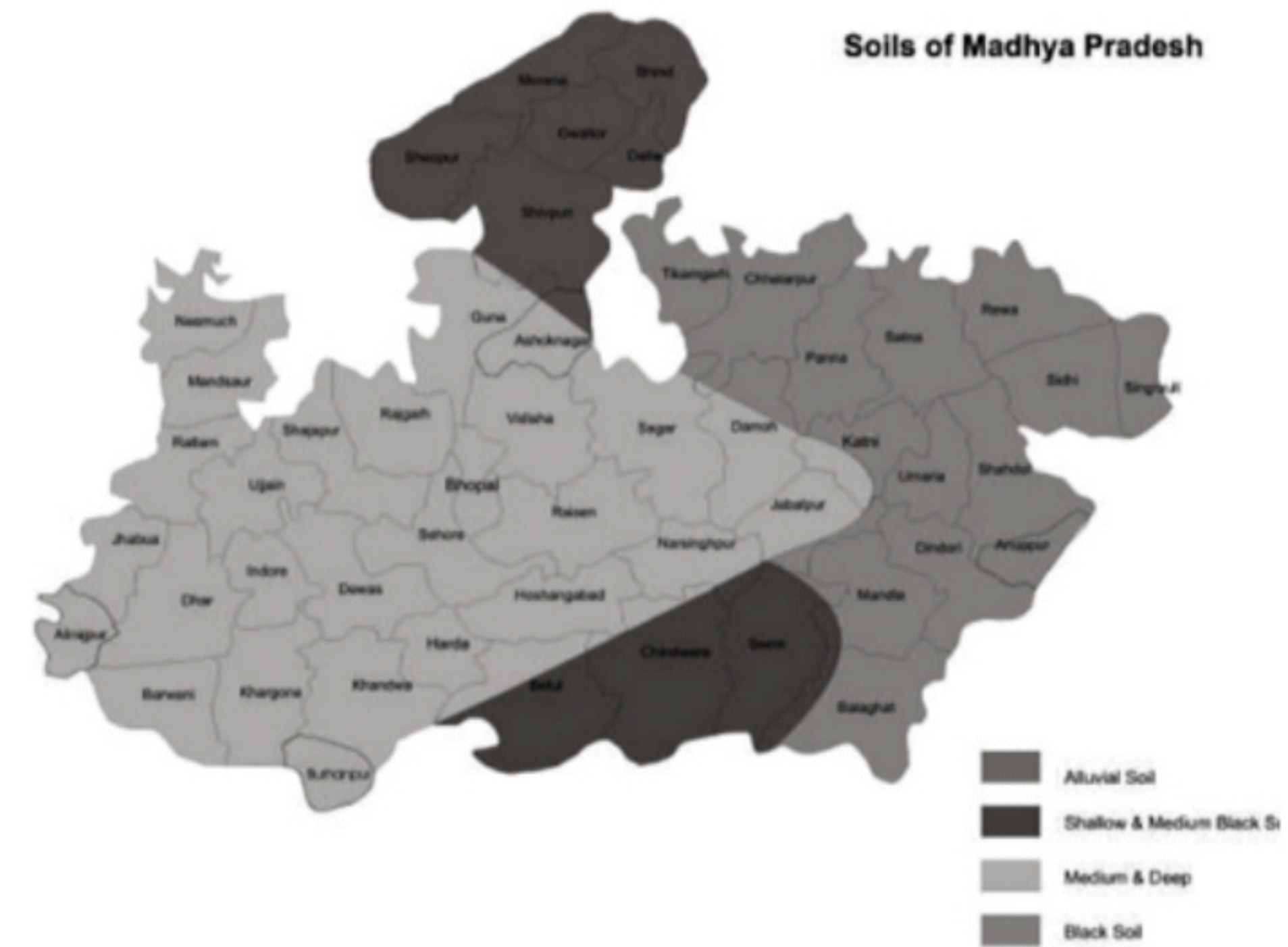
## Laterite Soil

- Comes from Latin word 'later' which means brick.
- Rich in iron oxide and aluminium.
- Less fertile soil found in North Western part of the state of Madhya Pradesh, i.e., in the districts of Shivpuri, Gwalior, Bhind and Morena.
- Laterite soil is not suitable for cultivation but with the application of manure and fertilizer soil can be made fertile and crops like wheat, sugarcane and cotton can be grown.



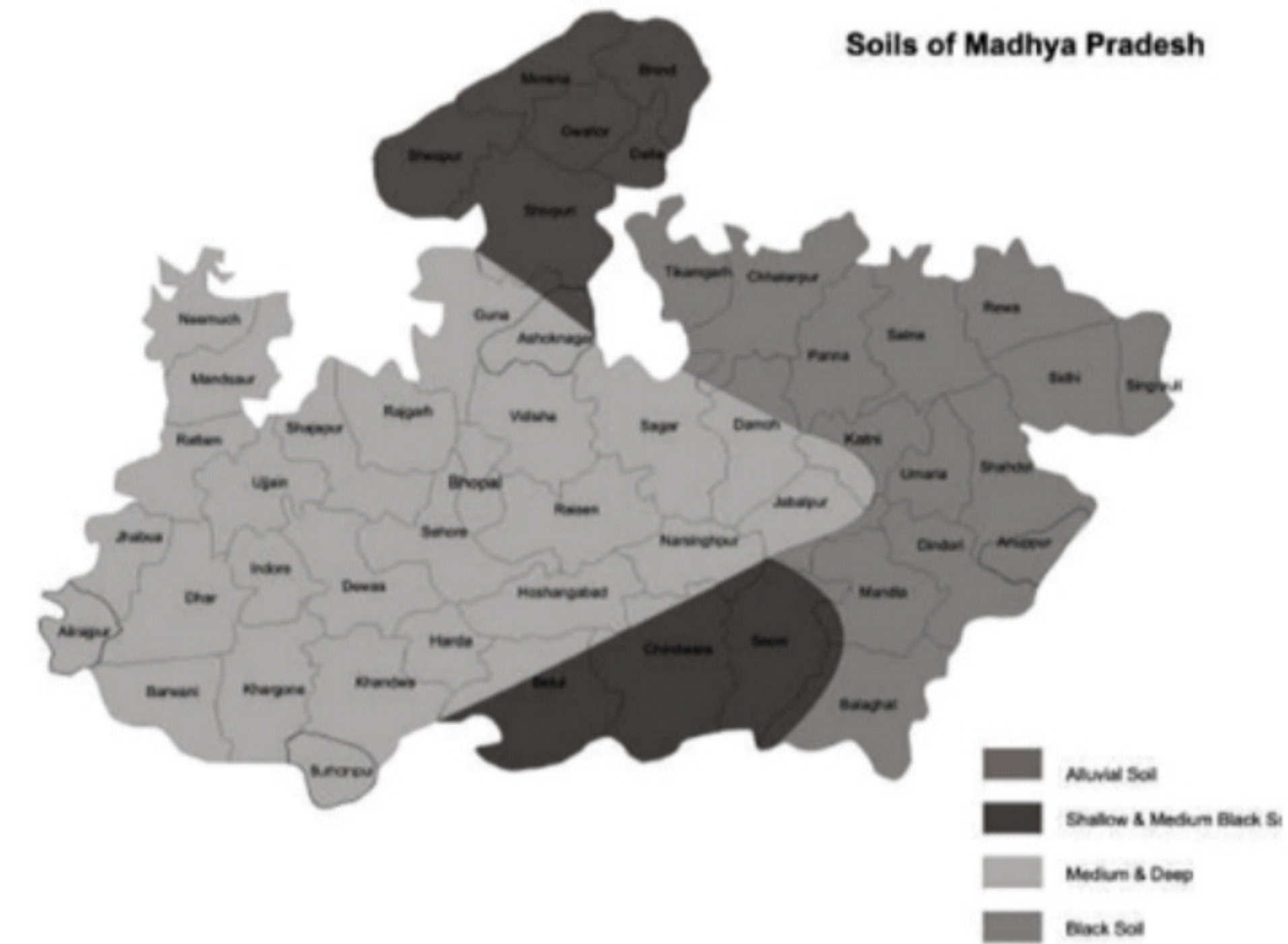
## Red Yellow Soil

- Red yellow soil develops on crystalline igneous rocks.
- Reddish color mainly due to the diffusion of iron in crystalline and metamorphic rocks.
- In MP, they are mainly found in Bundelkhand and Baghelkhand regions.
- In terms of districts it is mainly found in Mandla, Balaghat, Sidhi and Shahdol districts.



## Soil Erosion

Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice, snow, air, plants, animals, and humans.





- Black soil is also known as regur soil.
- Paddy is mainly grown on red yellow soil.
- Red yellow soils are mainly found in the eastern part of MP especially Baghelkhand region.
- The removal of the top layer of the soil which contains humus and other organic material is known as soil erosion.
- Chambal River in MP is responsible for maximum soil erosion.
- Red and yellow soil is found in sufficient quantity in Mandla, Balaghat, Shahdol and Umaria district.
- Most of the part of the state of Madhya Pradesh is covered by Black soil.

