

# Geographical Region and Life—Rajasthan

Human Environment  
Interconnectedness and




## The **BIG** idea

At the end of this lesson, learners will be able to:

- **outline** the physical features of the Thar Desert.
- **explore** the way of life of people in the Thar Desert,—their culture, food, economic activities, languages spoken.
- **distinguish** between the different physical features of the Aravalli Range and the hilly region.
- **assess** the way of life of people in the Aravalli region,—their culture, food, economic activities and languages spoken.

## News M<sub>a</sub>ker



Dr Rajendra Singh is popularly known as the ‘Waterman of India’. He has transformed the lives of lakhs of people in Rajasthan by his work in their fight for water. Since 1985 Dr Rajendra and his NGO named ‘Bharat Sangh’ (TBS) have built thousands of **johads**, to collect rainwater in many villages of India. He has not only given people their water back, but also has helped them understand how to keep a plentiful supply of groundwater. Many of them now have the skills to build and maintain **johads** for the future generations. For his dedicated work in the field of water conservation, Dr Singh has won prestigious awards such as the Magsaysay Award in 2001 and the Stockholm Water Prize in 2015.

## At a Glance



### PHYSICAL DIVISIONS OF RAJASTHAN

Thar Desert

Aravalli Range

Eastern Plains

South-eastern Plateau  
(Hadoti Plateau)

#### WORD TO KNOW

**johads:** small earthen check dams that capture and conserve rainwater that helps in recharging groundwater

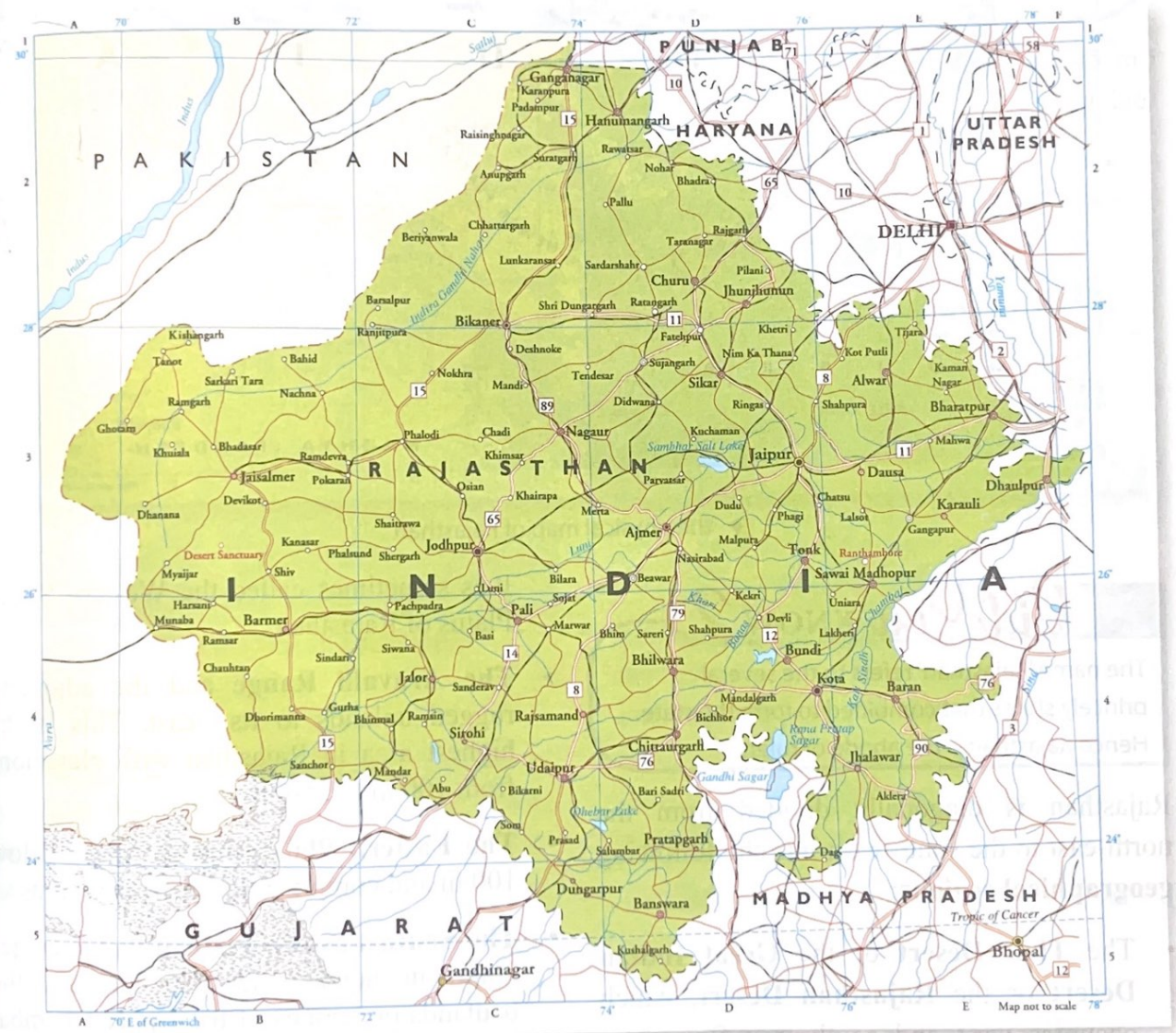
### Survival in the Thar Desert

Imagine you go on a safari in the Thar Desert with a small group and you get stranded there. Brainstorm in the class and discuss the essential items, skills, and knowledge needed to survive in such an extreme environment. Explore strategies for finding water, building shelter and navigating the desert.

### RAJASTHAN: PHYSICAL FEATURES

Situated in the north-western part of India, Rajasthan is the largest state of the country. Geographically, Rajasthan extends approximately between latitudes 23°N and 30°15'N and longitudes 69°40'E and 78°30'E.

Rajasthan shares the international borders with Pakistan in the west. The state shares border with Punjab and Haryana states in the north, Uttar Pradesh in the east, Madhya Pradesh in south-east and Gujarat in the south-west. Note their locations on the map.



◆ the political map of Rajasthan



◆ the physical map of Rajasthan

## Did You KNOW?

The name 'Rajasthan' refers to the several princely states that combined to form the state. Hence Rajasthan—the abode of rulers.

Rajasthan is diagonally divided from the north-east to the south-west into the following geographical regions:

- The **Thar Desert** or the **Great Indian Desert** or the **Rajasthan Desert**, which occupies west and south-west Rajasthan.

It is sometimes called the Western Plains of Rajasthan.

- The **Aravalli Range** and the adjacent rugged uplands to its east. This is the highest area in Rajasthan with elevations from 100 m to 350 m.
- The **Eastern Plains** that are often below 100 m and comprise flat riverine regions.
- The **South-Eastern Plateau** that averages 300m in height and also includes badlands or ravines of the Upper Chambal River and its tributaries.

## THAR DESERT

The Thar Desert or Rajasthan Desert makes up the major part of Rajasthan.

It extends westwards from the foothills of the Aravalli Range in India to the border of Pakistan.

The desert is bounded on the south by a salt marsh known as the Rann of Kachchh in Gujarat, on the east by the Aravalli Range and on the west by the Indus River plain in Pakistan.



- ◆ location of the Thar Desert in India

### Landforms

Most of the Thar Desert in Rajasthan is a dry, sandy undulating plain that slopes down westwards from the Aravalli foothills in the east. The major landforms here are:

- Extensive **sand sheets** or sand accumulations in the western part of the desert formed by wind or aeolian processes of deposition and erosion over millions of years.

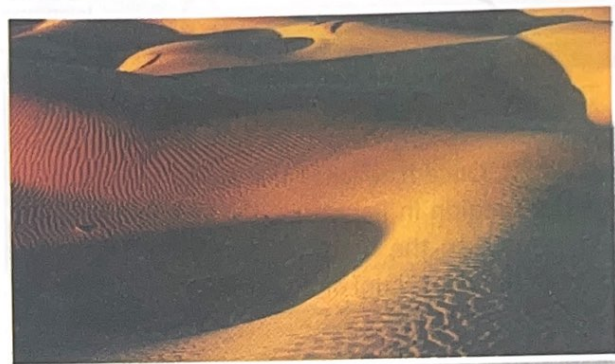
## Did You KNOW?

The word 'Thar' comes from the word 'Marusthali' meaning land with



◆ sand dunes of Rajasthan no life because of its dry arid climate and sandy desert soil that make it almost uninhabitable. In Pakistan this desert is known as the Cholistan or Rohi Desert or the Pat Desert.

- **Sand dunes** some as high as 15 m–45 m. The sand dunes keep shifting or moving due to the action of strong winds.



- ◆ a view of the sunset on the sand dunes of Rajasthan

- Some parts of the Thar landscape, especially the eastern half have **low, bare, rocky outcrops** that form **low hills** with very little sand, locally known as '**bhakar**'. These are more common near the Aravalli Range often rising above 200 m.
- The **Rajasthan Bagar**, a semi-arid plain which lies between the Thar Desert and the Aravalli Range and uplands. It is occupied by the Luni River and inland drainage of the Sambhar Lake.

- In this sandy and rocky wasteland, there are no large rivers. A few small streams, also contribute to limited riverine action.
- The **largest river** is the Luni, which rises in the Aravalli hills, flows southwest across part of the Thar Desert and into the Rann of Kachchh, a marshy area of **inland drainage** in Gujarat. This seasonal river and its small tributaries the Lilari, Mithri, Jojari, Jawai and Sukri are dry during parts of the year.
- Several small streams that form in the Thar Desert during the light rains begin and end in the desert sands and do not empty into the sea. They form areas of inland drainage or salt lakes.



◆ Rajasthan ranks at the forefront of millet cultivation in India.

### Climate and Rainfall

The climate of the Thar Desert is an arid, **desert continental climate** with extremes of temperature.

- **Summer** temperatures range from 40°C to 50°C. April to June are the hottest months.
- **Sandstorms** and dry, dusty winds with high velocity are common especially in the summer months.
- **Winter** temperatures range from 10°C to below freezing point and December and January are the coldest months.
- A **high diurnal variation of temperature** is seen in the daily temperatures. Days are hot but nights are cold, with occasional night frost.

The **annual rainfall** in the desert is very low.

- It decreases from east to west and south to north.
- It is about 10 to 25 cm in the extreme arid western part and about 50 cm in the semi arid south eastern part.

### Geo CONNECT



The River Luni is a freshwater river when it originates as the Sagarmati River out of the Aravallis. Once it reaches the sandy soils of the Barmer region in Rajasthan, the waters become saline due to the high salt content in the soil. Hence the name Luni or the 'river of salt'.

### Soils

Soil is a prime resource as it is important for the cultivation of crops and also determines the land use pattern. The soils in the Thar Desert comprise arid to semi-arid, sandy desert soils. They are coarse sandy gravelly soils with high soluble salt content (saline) and are not fertile unless well watered or irrigated. These include:

- red and yellow soils
- sandy loams
- brownish grey saline soils in the salt lakes.

This is because the summer monsoon winds from July to September that bring rainfall to the region are almost dry by the time they reach the Thar Desert as it is in the rain shadow of the Aravalli range.

- There is very little or no winter rainfall, because the winter monsoons do not bring rain.
- Sometimes showers are brought by western disturbances.



◆ a landscape of Rajasthan

### Vegetation

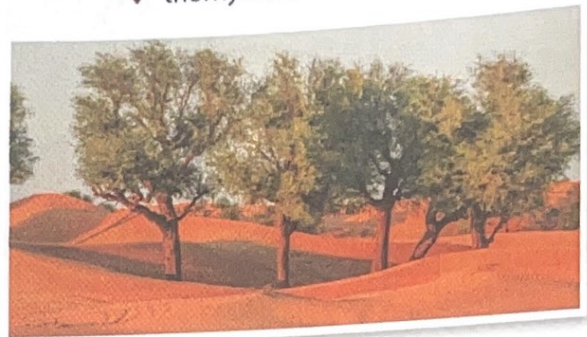
The vegetation in the Thar Desert is **dry thorny scrub**, due to the temperatures and low rainfall. As rainfall decreases the number of trees and shrubs becomes fewer. Stunted coarse grasses and thorny scrub are found on windward sides of dunes.

- Here the vegetation develops all kinds of **water-saving parts** to reduce evapotranspiration. They have long roots, waxy, leathery leaves or no leaves, stunted growth, prickly thorns and succulent stems. This type of vegetation is called **xerophytic or drought resistant vegetation**.

- Common drought resistant trees and shrubs grow especially in the east where there is more rainfall. They include *kikar* or *babul*, *khejri* and cacti. A variety of medicinal plants and herbs also grow in the desert.



◆ thorny scrub in Rajasthan



- ◆ Khejri is one of the most common tree species found in the dry regions of Rajasthan.



◆ Cactus

### Wildlife

Wherever there is some grassland in the desert, it has a rich biodiversity. The wildlife here evolves as it adapts to survive in the harsh desert conditions.

It includes:

- **mammals** like nilgai, blackbucks, chinkara (gazelles), antelope rat, mongoose, ratel or honey badger, desert fox, etc. are the common wildlife.
- **birds** like partridge and quail. The desert is also home to the endangered Great Indian Bustard. Their numbers are now increasing due to conservation efforts.
- **migratory birds** like sand grouse, ducks, and geese.



◆ a chinkara

### Find OUT

21<sup>ST</sup> CENTURY SKILLS Information Literacy Research

The Thar National Park, 3162 sq km, is a UNESCO World Natural Heritage Site and a protected natural area. It is one of the largest biosphere reserves in western India with interesting desert habitats and a variety of wildlife that is quite unique.

Find out some of the other UNESCO World Heritage sites of India and prepare a list.



◆ a Great Indian Bustard

## Environmental Issues

All over the world due to climate change many deserts are spreading by a process of **desertification**. This is also threatening the ecology of the Thar desert.

Vegetation depletion, soil and water erosion, topsoil salinity and industrial, mining and construction activities represent the other major **regional ecological risks** to the Thar Desert.

- **Human actions and land-management practices** have contributed to land degradation here.
- This calls for immediate government and community intervention through urgent conservation measures to use the natural resources of the region wisely and protect vast stretches of the desert where the ecosystem is being disrupted.



◆ a view of cracked soil in Rajasthan

## Way of Life in the Thar Desert

**Art and Craft:** The people of the Thar Desert are known for their beautiful craftsmanship. They make beautiful handicraft—jewellery, textiles, and pottery. Embroidery and mirror work are common in the region.

**Music and Dance:** Folk music and dance are important here. The Kalbeliya dance, often performed by the snake charmers of the region, is well known.

**Festivals:** Diwali, Holi, and Teej are the main festival.

**Food:** Wheat, millets, and pulses are popular. Dishes such as *dal baati churma* and *ker sangri* are popular dishes from this region.



◆ *Dal baati churma*

**Economic activities:** Agriculture is the main economic activity in the Thar Desert. Despite the arid conditions, farmers use traditional methods like well irrigation to grow crops such as wheat, barley, pulses, and mustard. Animal husbandry, particularly rearing of camels, goats, and sheep, is another common source of livelihood. Camels are the most important mode of transportation in the desert and provide milk and meat.

**Languages:** Rajasthani languages, such as Marwari, are widely spoken in the region. Hindi and Urdu are also spoken by people in towns.

### Checkpoint

#### Cause and Effect

Read about the effects of the extreme climate of the Thar desert on the flora and fauna present in the region. Discuss these effects in the class.

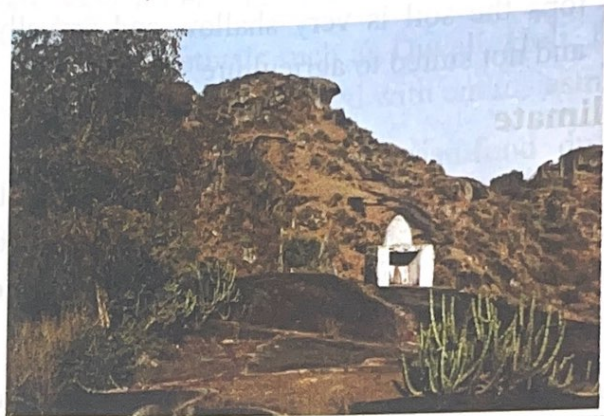
## THE ARAVALLI RANGE

The Aravalli Range of mountains lie in the north-western part of India. Starting near Delhi, it runs approximately for about 750 km in a south-west direction passing through southern Haryana, Rajasthan and ends in Gujarat. The major part of the Aravallis is in Eastern Rajasthan.

### Landforms

The Aravallis are one of the world's oldest fold mountains that started forming around 2.5 billion years ago. Due to weathering and erosion by natural forces, the original Aravalli range today comprises broken down scattered hills or ridges between 300m to 900m high.

The highest point of the Aravalli range is **Guru Shikhar** at an elevation of 1,722m. It is near Mount Abu, which is a popular hill station.



◆ Guru Shikhar—highest point of the Aravalli Range

The Aravalli Range acts as a barrier to the spread of the western Thar Desert and prevents the desertification of eastern Rajasthan. It also acts as a water divide between the Indus and Ganga river systems.

Several rivers, such as the tributaries of the Chambal River as well as the Luni, Banas, Mahi and Sabarmati, originate in the Aravallis. The Sambhar Salt Lake, the largest salt lake in Rajasthan, is in the east-central foothill region,



near Jaipur. It is formed in a depression west of the Aravallis and is about 230 sq kms in area.

### Did You KNOW?

While the Aravallis are considered to be one of the oldest fold mountains in the world, the Himalayas are young fold mountains, which are continuously rising even today due to mountain building or orogenic processes. The Aravallis are of the same age as the Appalachian Mountains in the USA.

### Soil

- In the valleys and adjoining plains the soil is deeper and well developed, and better suited to farming with addition of fertilisers and irrigation. Red loamy and clayey soils and brown soils are found here.
- Along the slopes of the ridges and on hill tops the soil is very shallow and gravelly and not suited to agriculture.

### Climate

In Delhi and Haryana, the Northern Aravalli range has a **humid subtropical** to a **hot semi-arid climate** with extremely hot summers and cool winters.

In Rajasthan, the Aravalli Range has a far more **moderate climate** than that in the Thar Desert due to the influence of altitude.

### Did You KNOW?

The Sambhar Salt Lake was named as a Ramsar site in 1990 and is one of the sites for conservation action under the Indian Wetland Conservation Programme. The water provides an important winter habitat and feeding ground for migratory birds, including many flamingos. Salt production from the lake has long been an important activity here.

The region is dry, with an average annual **rainfall** of about 75cm in the northern part and about 95cm further south, closer to the Arabian Sea where the influence of the monsoon is stronger. The windward slopes of the hills receive more rainfall than the leeward slopes.

### Vegetation

Large parts of the Aravalli Range are forested with **dry tropical deciduous forest**, especially on the eastern and southern slopes.

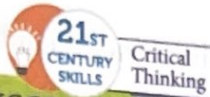
- The southern regions have a denser forest cover.
- With rainfall decreasing on the western slopes and to the north, the vegetation also changes to **dry thorn scrub forests** that adapt to the drier conditions.

In recent times, the Aravalli Range has become one of the most degraded and deforested areas in India. Forests are being cleared for land development and mining in Haryana and along the western slopes for agriculture. Today the state governments of both Rajasthan and Haryana are now making efforts to increase the forest area and declare what is left as protected forested area.

### Wildlife

The dry deciduous forest cover is home to a variety of fauna including the blue bull or *nilgai*, Indian gazelle or *chinkara*, four-horned antelope or *chousingha*, and blackbuck. Leopards, the Indian fox, striped hyena, jackal, the Indian pangolin and grey *langur* also inhabit the forests. The bird life in the Aravalli range includes a lot of migratory and local birds.

## Class DISCUSSION



The Mangar Bani (*bani* means small forest), on the Gurugram-Faridabad highway, is a 2.66 sq km sacred grove. For centuries, members of the Gujjar community have revered the vegetation in the grove and avoided cutting the trees. As a result, the grove has some of the best-preserved native vegetation in the region and a huge variety of tree species that has remained stable for a long time—a 'climax forest'.

Find out more details about Mangar Bani and discuss in the class.

### Environmental Issues

The Aravallis have always provided a rich habitat for wildlife, enhanced rainfall in the area and checked drought. However, today these ranges are threatened by deforestation, land degradation, encroachments, developmental activities and mining. This has led to serious consequences like desertification, increase in frequency of dust storms, drying up of lakes, loss of biodiversity, human wildlife conflicts, and air pollution.

### Let's Learn MORE

Rajasthan is one of the most beautiful states of India, and a very popular tourist destination because of its numerous majestic forts. The Chittorgarh Fort, one of the largest forts of India, is also located at Chittorgarh in Rajasthan.

Rajasthan is also the largest state of India and is well known for its cuisine, dance forms, clothing, etc. The popular cities include Jaipur (Pink City), Jodhpur (Blue City), Udaipur (White City) and Jhalawar (Purple City).

The state is also a part of the world's oldest civilization i.e Indus Valley Civilization.

Some of the measures for conservation of Aravallis are as follows:

1. monitoring and ensuring that mining operations do not resume in environmentally sensitive areas.
2. implementing and monitoring sound forest management practices, along with conservation awareness.
3. engaging the local communities in conservation programmes.

### Way of Life in the Aravalli Range

**Art and Craft:** Miniature paintings, handicraft, textiles, pottery, and jewellery are gifts from the region .

**Music and Dance:** Rajasthani folk music and dance such as Gawri, Timli and Kachhi Ghodi are popular in the region.

**Festivals:** Festivals such as Diwali, Holi, Eid, and Navratri are celebrated with enthusiasm.

**Food:** Most people eat vegetarian food due to cultural and geographical factors. Dishes such as *dal baati churma*, *gatte ki sabzi* and *ker sangri* are specialities from the region. Use of spices and *ghee* is very popular.

**Economic activities:** Agriculture is the main source of livelihood here. Wheat, millets, pulses and mustard are the main crops in this region. The traditional water harvesting methods using stepwells are well known.

The Aravalli Range has minerals like marble, granite, and limestone, which are a good source of income in the region. However, the mining activities have also led to some environmental problems in the region. Tourism is also a very important source of income in the region and

places such as Udaipur, Jaipur, Mount Abu and Kumbhalgarh Fort are popular tourist destination.

**Languages:** The different dialects, such as Marwari, Dhundhari, and Mewari, are mainly spoken by the natives of this region. Hindi is also widely spoken in the region.

### Checkpoint

#### Connecting Micro to Macro

You have already learned about the geographical regions of India. Draw parallels between the geographical regions of Rajasthan with similar regions of India. Discuss your observations in the class.

## EASTERN PLAINS

The Eastern Plains of Rajasthan comprise three areas:

1. plains formed by the Ghaggar River along the Punjab-Haryana border to the north-east,
2. plains along the Lower Chambal River and its tributaries to the east, and
3. a region drained by the Mahi River and its tributaries to the south-east.

### Landforms

The north-east plains are flat and low and drained by the Ghaggar River that is mostly a dry river bed that flows from Punjab-Haryana into Rajasthan and disappears into the desert sands here. The plains here receive water from the Indira Gandhi Canal, which is fed by the Beas and Satluj rivers from Punjab.

To the east, the land is drained by the lower reaches of the Chambal River and its tributaries

the Sind, Gambhir, Morel and Banas. The plains average 50m in height and descend to the flat plains of the Yamuna basin in UP to the east.

To the south-east bordering Gujarat, is a low undulating plain area drained by the Mahi River and its tributaries.

### Soils

The Eastern Plains have fertile soils and therefore are important agriculturally. They support large populations.

Coarse loamy to fine silty alluvial soils are formed by deposition by the rivers that flow through the region.

These change away from the river valley to reddish to yellowish brown sandy soils in the north-east and red and mixed black soil along the eastern margins bordering the plateau region.

### Climate and Rainfall

Most parts of these plains experience a **sub-tropical climate**. While the Mahi plains to the south-east are more **tropical** with temperatures ranging from 17°C in winter to over 30°C in summer, the north-east and eastern part have more of a continental climate with colder winters that are below 15°C and hotter summers that are over 35°C.

The Mahi plains, which are closer to the Gujarat coast, receive a higher annual rainfall of about 100cm brought by the Southwest monsoons. This decreases northwards to about 60cm to 80cm, towards the parts of the Ghaggar and Chambal plains.

## Vegetation

Today much of the natural vegetation that once comprised **tropical deciduous forests** and **dry thorn forests**, has been cleared to make way for agriculture. Some grassland vegetation with bushes occupies several parts of the plains.

## Wildlife

The forests that remain provide a habitat for a variety of deer, hyena, tiger, wolf, gharial and turtles and a wide variety of birds like bulbul, quail, partridge and peacocks. The Chambal and Mahi Rivers provide a rich habitat for diverse freshwater fish species.

The Band Baretha Sanctuary, Keoladeo Ghana National Park and Ranthambore Tiger Reserve protect and conserve the wildlife here.

## Way of life in the Eastern Plains of Rajasthan

**Art and Crafts:** Traditional art forms such as Kota Doria sarees, pottery, and stone carving are the main items for which this region is known across the country.

**Music and Dance:** The Ghoomar dance is a popular traditional dance form in this region, and a major tourist attraction.

**Festivals:** Diwali, Holi, Teej and Gangaur are some of the major festivals celebrated here.



◆ People celebrating Gangaur

**Food:** The eastern plains of Rajasthan are known for their spicy dishes. *Dal baati churma*, *gatte ki sabzi*, and *ker sangri* are also popular here. *Ghevar* and malpua are eaten during festivals and special occasions such as weddings and social celebrations.



◆ ghevar—disc shaped sweet eaten in Rajasthan

**Economic Activities:** Agriculture is the main economic activity all over the plains which have some of the most fertile soils. Crops like wheat, millets, pulses, and oilseeds are grown here. Cattle rearing, especially for milk, is also a major source of livelihood.

**Languages:** Various dialects of Rajasthani are spoken here. They include Mewati, Marwari and Jaipuri, along with the Hindi language

## SOUTH-EASTERN PLATEAU (HADOTI PLATEAU)

The South-Eastern Plateau, commonly referred to as the Hadoti Plateau, is in the south-eastern corner of Rajasthan along the border with Madhya Pradesh. Extending from Bundi district southeastwards, it is an extension of the Malwa Plateau and Central Highlands of Madhya Pradesh into Rajasthan.

## Landforms

This plateau region has an elevation of 200m to 500m with a slope from south to north as seen from the flow of the Chambal River.

It is made up of low hills like the Mukundwara, and the surface in many places has been cut up or dissected by erosion by the upper Chambal River and its tributaries the Parbati and Kuno rivers.

The Chambal and its tributaries originate in Madhya Pradesh in the Vindhyas and flow northwards through this South-eastern plateau region. Large parts of this area display 'badland' topography that is associated with gully erosion. This is due to the swift flow of the rivers, and poor vegetation cover, that causes the rivers to cut deep ravines or gullies into the land surface by downward erosion. This rugged topography is typically known as 'badlands' and the Chambal badlands are one of the most extensive in the world.

## Soils

Being an extension of the Malwa Plateau and the Central Highlands the soils are largely formed due to early volcanic activity and are mostly brown to black soil. To the north half of the plateau reddish brown soil is found. With irrigation and addition of fertilisers, these soils can be used for agriculture.

## Climate and Rainfall

Due to its latitudinal location and altitude the climate is mostly sub tropical.

Summer temperatures range from 27°C to 30°C while winters are between 17°C to 20°C.

The region receives the heaviest rainfall in the state. Annual rainfall is between 70 to 120cm, brought by the Southwest Monsoons. It decreases from south to north.

## Vegetation

**Mixed Wet and Dry Tropical Deciduous Forests** and coarse grasslands are the typical natural vegetation in the region. *Babul, bel, tendu, khajra, khair, bamboo, amaltas* and some teak trees are common here.

## Wildlife

The region provides a rich habitat for animals like sloth bear, panther, tiger, pangolin, porcupine, hyena, blue bull, crocodiles, snakes and turtles. Birds include flycatcher, tree pie, green pigeon, parakeets and woodpeckers. Migratory water birds flock to the tanks in the winter.

Dara Wildlife Sanctuary, Jawahar Sagar Sanctuary, and the Shergarh Sanctuary are important wildlife reserved and protected areas.

## Way of Life in the South-eastern Plateau

**Art and Craft:** The region is well known for traditional art and crafts such as Kota sarees, colourful lac jewellery and miniature paintings. The Hadoti region is famous for intricate early age rock and stone carvings and paintings in caves and rock shelters. Kota is famous for its miniature art. Magnificent historical forts and palaces, such as the Kota Fort, are major tourist attractions.

Traditional items of clothing, such as turbans for men and colourful ghagras for women, are common.

**Music and Dance:** Ghoomar, Kalbelia and Bhawai are the popular dance form of the

region. The folk songs here generally narrate tales of valour and love.



◆ a folk dancer performing Ghoomar

**Festivals:** Dussehra, Diwali, Holi, Kajli Teej and Gangaur are the major festivals celebrated in the region.

**Food:** The local cuisine like in the rest of Rajasthan uses gram flour in the preparation of a wide variety of dishes that are similar all over the state. *Dal bafla* or *bafla baati*, *gatte ki sabzi*, *bajre ki khichdi*, *methi dahi macchli*, *gol maans*, *kacher kaalamaans*, *maan ki kadhi*, *gunja*, *panchkuta* and *Kota ki kachori*, are famous dishes here. Various types of *rotis* (bread) are staples. Locally grown *bajra* and maize are used to make these. Milk and milk products are used to make a variety of sweets like *raabdi* and *laapsi* (*halwa*).

**Economic activities:** Agriculture and cattle rearing are the two main economic activities.

The cattle rearing industry yields milk and a wide variety of milk products.

- *Bajra*, maize, sugar cane, mustard, beans, soyabean, groundnut and pulses are the crops usually grown and locally consumed. Fruits and vegetables are also grown

- Tourism is also a growing economic activity and encourages local industry especially art and craft.

Gum, *tendu* leaves, honey, wax and grasses are forest produce collected by the locals. Some flowers and fruits are also collected and used as edible items.

**Languages:** Hadauti is the main Rajasthani dialect spoken along with Dhundhari and Mewari. Hindi is also spoken by a large number of people.

### Environmental Issues

The rapid population growth, droughts, scarce water resources, unscientific development of natural resources, unplanned industrialization and uncontrolled urbanization all create environmental issues that need to be tackled.

Land degradation, groundwater and air pollution, lack of a stable vegetation cover and salinisation of the soil, require urgent attention.

To address the huge task of environmental conservation and sustainable economic development, a range of measures have been adopted by the Rajasthan Government.

### Find OUT



Information Literacy  
Research

Local and tribal people living in the Hadoti Plateau are largely dependent on the forests to meet their medicinal requirements.

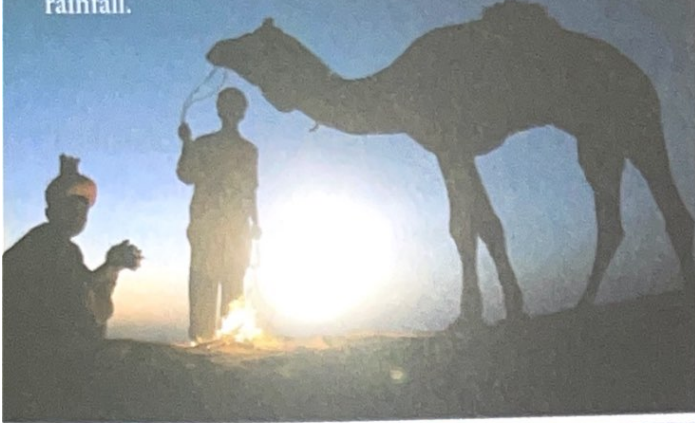
For example, *Madanaphala* that grows in this region is used to induce vomit that helps remove the toxins from the body.

Research on the Internet to learn about the medicinal plants found in Rajasthan and how they are used to treat different ailments.

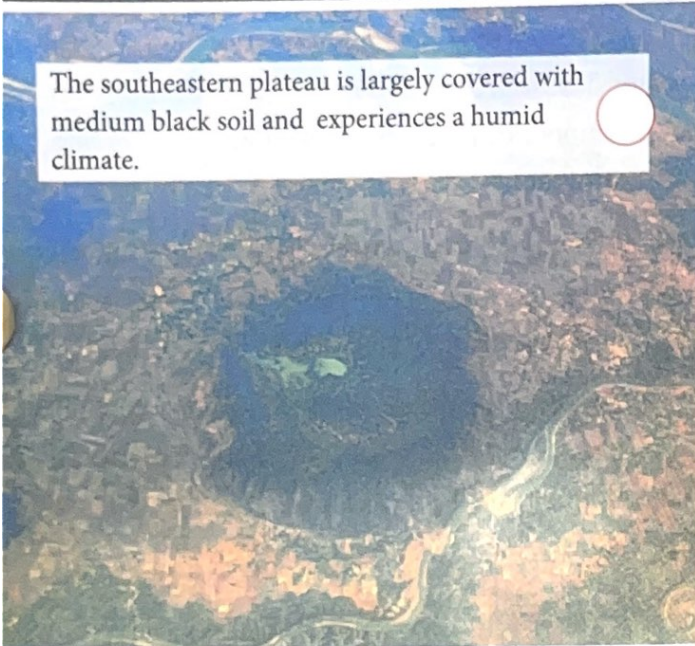
## Visual Summary

Tick (✓) the concepts you have understood.

The climate of the Thar Desert is arid or semi-arid with extreme temperatures and low rainfall.



The southeastern plateau is largely covered with medium black soil and experiences a humid climate.



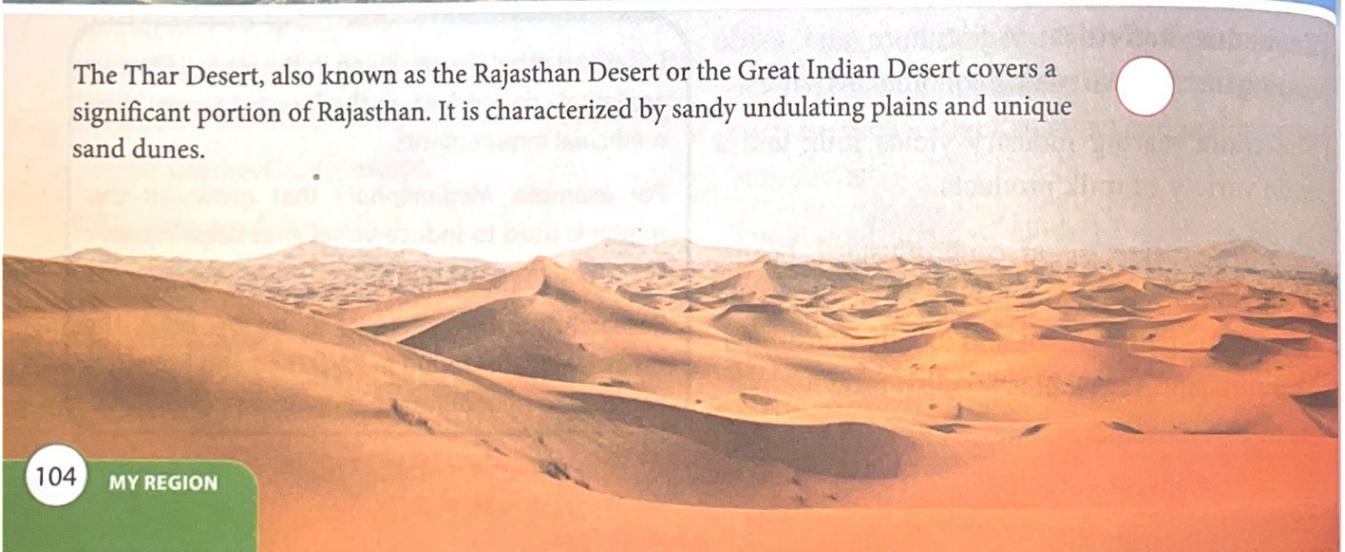
The Aravalli Range is one of the oldest fold mountains in the world, composed of various types of rocks. It acts as a barrier to desertification and separates the Indus and Ganga River systems.



The Eastern Plain extends between the Aravali hills in the west to the Hadoti plateau in the east. It is the most fertile area in Rajasthan and therefore the most populated.



The Thar Desert, also known as the Rajasthan Desert or the Great Indian Desert covers a significant portion of Rajasthan. It is characterized by sandy undulating plains and unique sand dunes.



## Let's Recall

### I. Tick (✓) the correct option.

- Which country shares its international border with Rajasthan?  
a. Bangladesh  b. China  c. Pakistan
- Which mountain range acts as a barrier to the spread of the Thar Desert?  
a. Himalayas  b. Western Ghats  c. Aravalli Range
- Which is the predominant vegetation in the Thar Desert?  
a. Tropical rainforest  b. Mangrove forest  c. Dry thorny scrub
- Which river system is divided by the Aravalli range?  
a. Indus and Ganga  b. Brahmaputra and Godavari  c. Krishna and Kaveri
- Which is the highest point in the Aravalli Range?  
a. Mount Everest  b. Guru Shikhar  d. Mount Abu

### II. Fill in the blanks.

- The Western Sandy Plains have an ..... landscape.
- The word ..... comes from the word 'Marusthali'.
- Rajasthan is also called a region of .....
- In ..... and ....., the Northern Aravalli range has a humid subtropical climate to a hot semi-arid climate with extremely hot summers and cool winters.
- The ..... on the Gurugram-Faridabad highway, is a 2.66 sq km sacred grove.

### III. State whether the following statements are true or false. Rewrite the corrected statements in your notebook.

- Rajasthan is located in Northeast India.
- The Thar Desert is surrounded by the Aravalli Range to the east.
- The Luni River is a seasonal river that flows through the Thar Desert.
- The Aravalli Range is one of the youngest fold mountains in the world.
- The Aravalli Range acts as a barrier to the spread of the Thar Desert.

### IV. There are two statements given as Assertion (A) and Reason (R). Read both the statements and choose the correct option.

- Assertion (A): Desert plants have deep roots.

Reason (R): Deep roots save them from being uprooted when a storm hits the area.

- Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
- Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).
- Assertion (A) is true, but Reason (R) is false.
- Assertion (A) is false, but Reason (R) is true.



2. Assertion (A): Windward side of the Aravalli Range experiences more rainfall.

Reason (R): The side is lying across the path of moisture-laden winds.

- Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
- Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).
- Assertion (A) is true, but Reason (R) is false.
- Assertion (A) is false, but Reason (R) is true.

**V. Answer the following questions in brief.**

- Which are the major divisions of geographical regions of Rajasthan?
- What type of climate is experienced in the Thar Desert?
- What is the significance of the Aravalli Range in relation to the Thar Desert?
- Describe the way of life in Rajasthan.
- What are the major economic activities across different region of Rajasthan?

**VI. Answer the following questions in detail.**

- Describe the geographical location of the Thar Desert and its neighbouring regions. How does geography play a major role on the climate of Rajasthan?
- Describe the main physical features of Rajasthan. Also, list the major characteristics.
- Discuss the economic activities and livelihood options available to the people living in the Thar desert.
- Describe the location and different features of Aravalli mountains. Also describe the wildlife found in the region.
- Write a short note on the way of life of people in different regions of Rajasthan.

## My Geography CORNER

for experiential learning

### Be a Geographer



Information Literacy  
Research

The Indira Gandhi Canal is the country's longest canal which provides irrigation facilities in the Thar desert. Farmers living along the Indira Gandhi Canal have managed to reverse desertification in large areas in Jaisalmer. Search the Internet and make a PowerPoint presentation on this canal and show it in your class.

### Food and Delight



Information Literacy  
Research

Research and find out the different dishes that are included in the Rajasthani cuisine. Have you tasted Rajasthani dishes? If yes, discuss your experience about the taste with your friends. What are the major differences in your local cuisine and Rajasthani cuisine. Mention 3 major differences.

## Be a Volunteer

Have you ever volunteered for a conservation project? Discuss your experience in the class. Learn about different conservation projects that are active across the state of Rajasthan. Write a detailed report about different conservation projects and share it with your teacher.



21<sup>ST</sup>  
CENTURY  
SKILLS

Communication  
Written Communication

## Map Exercise

Mark the following districts of Rajasthan on an outline map of Rajasthan.

1. Ajmer
2. Alwar
3. Bikaner
4. Pratapgarh
5. Sirohi



21<sup>ST</sup>  
CENTURY  
SKILLS

Information Literacy  
Research

## HOTS

Desertification is a major concern across the world. It is a process in which vegetation in the drylands, i.e., arid and semi-arid lands, such as grasslands or shrublands gradually disappears. It remains a major cause of global warming. You can explore the internet to collect more information on desertification and related issues. How can you contribute to address the major issue of desertification? Prepare a report and share it with your partner.



21<sup>ST</sup>  
CENTURY  
SKILLS

Critical Thinking



◆ barren land