7 Life in the Deserts

In Chapter 5, you have seen that water means life to plants, animals and people. It is difficult for anyone to live in places where there is no water to drink, where there is no grass for their cattle to feed on and where there is no water to help the crops to grow.

We will now learn about the places in the world where people have learned to cope with extreme harsh temperatures; in some places as hot as fire and some as cold as ice. These are the desert areas of the world. These are characterised by low rainfall, scanty vegetation and extreme temperatures. Depending on the temperatures there can be hot deserts or cold deserts. The people inhabit these lands wherever little water is available to practise agriculture.

Glossary

Desert: It is an arid region characteriesed by extremely high or low temperatures and has scarce vegetation.

The Hot Desert – Sahara

Look at the map of the world and the continent of Africa. Locate the Sahara desert covering a large part of North Africa. It is the world's largest desert. It has an area of around 8.54 million sq. km. Do you recall that India has an area of 3.28 million sq. km? The Sahara desert touches eleven countries. These are Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Sudan, Tunisia and Western Sahara.



Fig. 7.1: The Sahara Desert

When you think of a desert the picture that immediately comes to your mind is that of sand. But besides the vast stretches of sands, that Sahara desert is covered with, there are also gravel plains and elevated plateaus with bare rocky surface. These rocky surfaces may be more than 2500m high at some places.

Do you know?

You will be surprised to know that present day Sahara once used to be a lush green plain. Cave paintings in Sahara desert show that there used to be rivers with crocodiles. Elephants, lions, giraffes, ostriches, sheep, cattle and goats were common animals. But the change in climate has changed it to a very hot and dry region.



Fig. 7.2: Sahara in Africa

Do you know?

Al Azizia in the Sahara desert, south of Tripoli, Libya recorded the highest temperature of 57.7°C in 1922.

Climate

The climate of the Sahara desert is scorching hot and parch dry. It has a short rainy season. The sky is cloudless and clear. Here, the moisture evaporates faster than it accumulates. Days are unbelievably hot. The temperatures during the day may soar as high as 50°C, heating up the sand and the bare rocks, which in turn radiates heat making everything around hot. The nights may be freezing cold with temperatures nearing zero degrees.

Flora and Fauna

Vegetation in the Sahara desert includes cactus, date palms and acacia. In some places there are oasis – green islands with date palms surrounding them. Camels, hyenas, jackals, foxes, scorpions, many varieties of

snakes and lizards are the prominent animal species living there.



Fig. 7.3: Oasis in the Sahara Desert



Do you know?

Scientists have actually found skeletons of fish in this desert. What could have happened?

People

The Sahara desert despite its harsh climate has been inhabited by various groups of people, who pursue different activities. Among them are the Bedouins and Tuaregs. These groups are nomadic tribes rearing livestock such as goats, sheep, camels and horses. These animals provide them with milk, hides from which they make leather for belts, slippers, water bottles; hair is used for mats, carpets, clothes and blankets. They wear heavy robes as protection against dust storms and hot winds.

The oasis in the Sahara and the Nile Valley in Egypt supports settled population. Since water is available, the people grow date palms. Crops such as rice, wheat, barley and beans are also grown. Egyptian cotton, famous worldwide is grown in Egypt.

The discovery of oil – a product in great demand throughout the world, in Algeria, Libya and Egypt is constantly transforming the Sahara desert. Other minerals of importance that are found in the area include iron, phosphorus, manganese and uranium.

The cultural landscape of the Sahara is undergoing change. Gleaming glass cased office buildings tower over mosques and superhighways crisscross the ancient camel paths. Trucks are replacing camels in the salt trade. Tuaregs are seen acting as guides to foreign tourists. More and more nomadic herdsmen are taking to city life finding jobs in oil and gas operations.



Do you know?

Depressions are formed when the wind blows away the sands. In the depressions where underground water reaches the surface, an oasis is formed. These areas are fertile. People may settle around these water bodies and grow date palms and other crops. Sometimes the oasis may be abnormally large. Tafilalet Oasis in Morocco is a large oasis with an area of about 13,000 sq.km.

Word Origin

Ladakh is made up of two words – "La" meaning 'mountain pass' and "Dak" meaning 'country'

Do you know?

Drass, one of the coldest inhabited places on earth is located in Ladakh.

The Cold Desert - Ladakh

Ladakh is a **cold desert** lying in the Great Himalayas, on the eastern side of Jammu and Kashmir (Fig. 7.4). The **Karakoram Range** in the north and the **Zanskar mountains** in the south enclose it. Several rivers flow through Ladakh, **Indus** being the most important among them. The rivers form deep valleys and gorges. Several glaciers are found in Ladakh, for example the **Gangri** glacier.

The altitude in Ladakh varies from about 3000m in **Kargil** to more than 8,000m in the Karakoram. Due to its high altitude, the climate is extremely cold and dry. The air at this altitude is so thin that the heat of the sun can be felt intensely. The day temperatures in summer are just above zero degree and the night temperatures well below –30°C. It is freezing cold in the winters when the temperatures may remain below –40°C for most of the time. As it lies

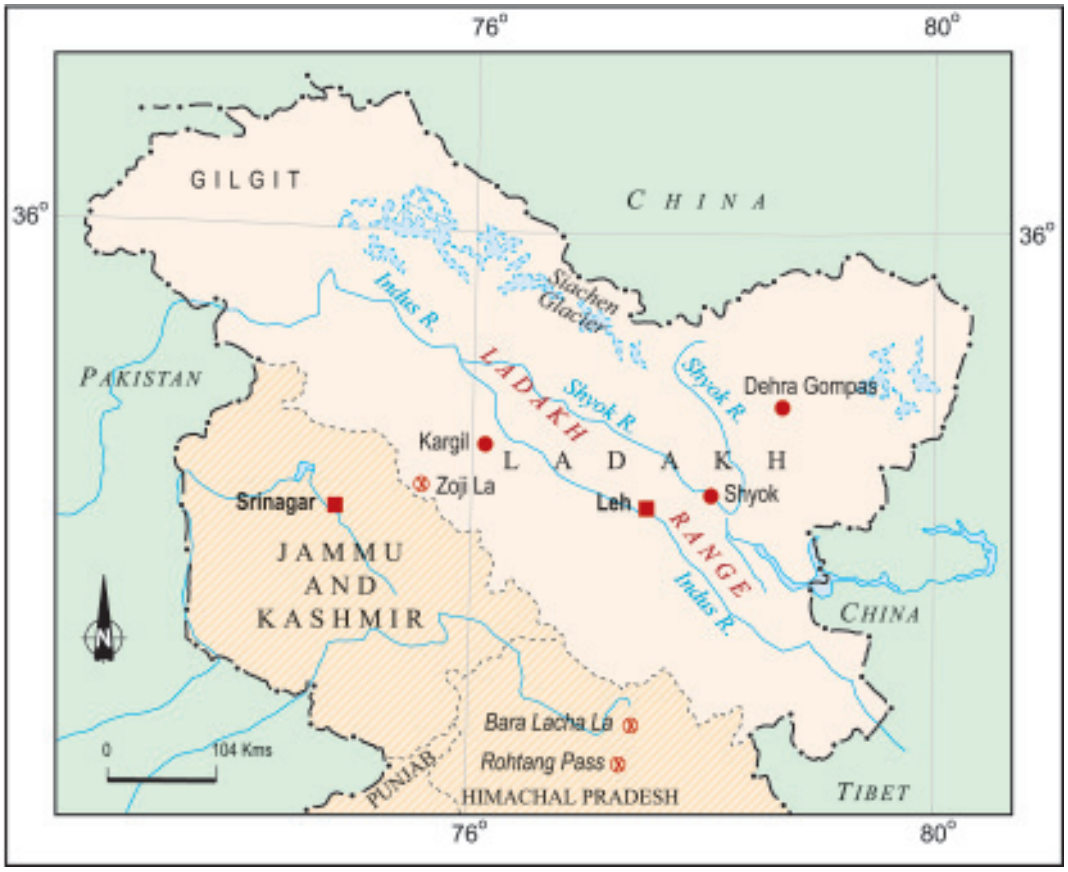


Fig. 7.4: Ladakh

in the rain shadow of the Himalayas, there is little rainfall, as low as 10 cm every year. The area experiences freezing winds and burning hot sunlight. You will be surprised to know that if you sit in the sun with your feet in the shade, you may suffer from both sunstroke and frost bite at the same time.

Do you know?

Ladakh is also known as **Khapa-chan** which means snow land.

Flora and Fauna

Due to high aridity, the vegetation is sparse. There are scanty patches of grasses and shrubs for animals to graze. Groves of willows and poplars are seen in the valleys. During the summers, fruit trees such as apples, apricots and walnuts bloom. Several species of birds are sighted in Ladakh. Robins, redstarts, Tibetan snowcock, raven and hoopoe are common. Some of these are migratory birds. The animals of Ladakh are wild goats, wild sheep, yak and special kinds of dogs. The animals are reared to provide for the milk, meat and hides. Yak's milk is used to make cheese and butter. The hair of the sheep and goat is used to make woollens.

Do you know?

The Chiru or the Tibetan antelope is an endangered species. It is hunted for its wool known as *shahtoosh*, which is light in weight and extremely warm.

People

Do you find any resemblance between the people of Ladakh and the inhabitants of Tibet and Central Asia? The people here are either Muslims or Buddhists. In fact several Buddhists monasteries dot the Ladakhi landscape with their traditional 'gompas'. Some famous monasteries are Hemis, Thiksey, Shey and Lamayuru (Fig. 7.5).

Do you know?

The finest cricket bats are made from the wood of the willow trees.

In the summer season the people are busy cultivating barley, potatoes, peas, beans and turnip. The climate in winter months is so harsh that people keep themselves engaged in festivities and ceremonies. The women are very hard working. They work not only in the house and fields, but also manage small business and shops. Leh, the capital of Ladakh is well connected both by road and air. The National Highway 1A connects Leh to Kashmir Valley through the Zoji la Pass. Can you name some more passes in the Himalayas?

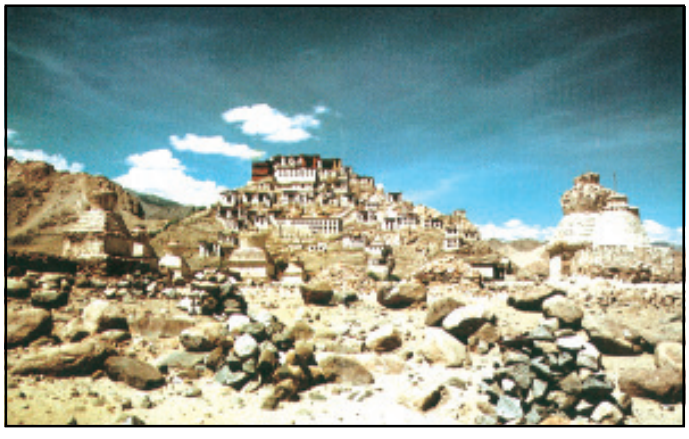


Fig. 7.5: Thiksey Monastery

Do you know?

Manali - Leh highway crosses four passes, Rohtang la, Baralacha la Lungalacha la and Tanglang la. The highway opens only between July and September when snow is cleared from the road.



Baralacha la

Tourism is a major activity with several tourists streaming in from within India and abroad. Visits to the gompas, treks to see the meadows and glaciers, witnessing ceremonies and festivities are important activities.



Fig. 7.6: *Ladakhi Women in Traditional Dress*

Life of people is undergoing change due to modernisation. But the people of Ladakh have over the centuries learned to live in balance and harmony with nature. Due to scarcity of resources like water and fuel, they are used with reverence and care. Nothing is discarded or wasted.

Exercises

1. Answer the following questions.

(a) What are the two types of deserts found in the world?

(b) In which continent is the Sahara desert located?

(c) What are the climatic conditions of the Ladakh desert?

(d) What mainly attracts tourists to Ladakh?

(e) What type of clothes the people of the Sahara desert wear?

(f) Name the trees that grow in Ladakh.

2. Tick the correct answer.

(i) Sahara is located in which part of Africa

(a) eastern (b) northern (c) western

(ii) Sahara is what type of desert

(a) cold (b) hot (c) mild

(iii) The Ladakh desert is mainly inhabited by

(a) Christians and Muslims

(b) Buddhists and Muslims

(c) Christians and Buddhists

(iv) Deserts are characterised by

(a) scanty vegetation

(b) heavy precipitation

(c) low evaporation

(v) Hemis in the Ladakh is a famous
(a) temple (b) church (c) monastery

(vi) Egypt is famous for growing
(a) wheat (b) maize (c) cotton

3. Match the following.

(i) Oasis	(a) Libya
(ii) Bedouins	(b) monastery
(iii) Oil	(c) glacier
(iv) Gangri	(d) depressions with water
(v) Lamayuru	(e) cold desert
	(f) Sahara

4. Give reasons.

(i) There is scanty vegetation in the deserts.

(ii) People of the Sahara desert wear heavy robes.

5. Map skills.

(i) On the outline map of Africa, mark the Sahara desert and any four countries around it.

(ii) On the outline map of India, mark the Karakoram Range, Zanskar Range, Ladakh and Zoji La pass.

6. For fun.

Desert Game

This is a class room activity involving all the students. The teacher will create a list of desert creatures. The number of the creatures should be same as the number of students in the class. The creatures can be picked up from the categories of mammals, birds and reptiles. Mammals can include – camel, yak, fox, sheep, goat, antelope…
Birds – raven, eagle, vulture, turkey…
Reptiles – snakes …

Assign one desert creature to each student. Ask the student to write three characteristics of the creature on plain sheet of paper. (students can use index cards of size 10 cm × 15 cm). Questions such as - in what type of deserts it is found? Major adaptation? Use to man?

These characteristics will be used as clues in the guessing game. On the board make three columns – mammals, birs and reptiles. Paste a sheet of paper in the column under the particular category. The class can be divided in three to four groups. They will compete against each other in the 'desert game'. Each group now takes turn in guessing the correct answer. Explain to the class that they have to guess what animal matches the characteristics listed on the paper.
For example:

- Animal of hot desert
- Has double set of eyelashes to keep away the sand
- The hide is used for making water bottles

The correct answer is 'camel'. Within the group there will be a student who has prepared the card. That student should not answer. Ten points are awarded for the correct answer.

This game will enable students to understand the desert. You can play the same game by taking different types of fruits, flora and the clothes the people wear.

Some Internet Sources for More Information

http://school.discovery.com/

http://nationalgeographic.com/

http://www.incredibleindia.org/

http://www.wikipedia.org/

http://www.greenpeace.org/

http://www.britannica.com/

http;//www.animalplanet.co.uk/