

## Desert Friendly Animal – The Camel

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### Introduction

An important component of desert ecosystem from time immemorial which has been recognized as the “Ship of the Desert” is the camel. Majority of the population of the desert depends upon this animal for the meat, milk, hides and also for transportation in the desert.

The camel population in India constitutes 6- 8 % of the total camel population of the world. As per the FAO production year book 1985, camel population of the world was 17.44 millions. India ranks third next to Somalia and Sudan respectively. As per the census of 1997 the total camel population of India is 10.01 lakhs. The word camel is derived from the Greek word “Kremal”.

The scientific name of the Indian camel is *Camelus dromedaries*, it is less heavily built, longer in hind legs with a soft coat and is comparatively thin. The average weight is 454 – 590 kgs and 35-40 Kgs in adults and young ones, respectively.

The camel belongs to genus *Camelus* having two species:

1. Dromedary or One humped camel – Found in Africa, Arabia, Iran, Afghanistan and India.
2. Bactrian or Two humped camel - Found in Central Asia reaching up to Mongolia and Western parts of China.

Camel breeds found in India

Classification of Indian camels:

- A. Baggage camel
- B. Riding camels

A) Baggage camels are heavier, hence are suitable for the plains and other hilly areas, with sturdy musculature of legs.

B) Riding camels are strong, sturdy, having thinner legs and their muscles are comparatively less developed.

Breeds of camel

Camel breeds are classified as per their agro ecological and geological areas. There are in all eight commonly found camel breeds in India which are mostly used for different type of work viz:

1. Bikaneri
2. Jaisalmeri

3. Sindhi
4. Marwari
5. Mewari
6. Jalori
7. Shekawati
8. Kutchi

**1. Bikaneri:** It is a multi purpose breed, classified on weight as heavy and is slow in work. It is a typical desert breed which may have been developed by interseminating between Sindhi, Baluchi, Afghani and Desi camel. They have a good height and strong built. Their colour varies from dark brown to light brown and dark red to brown red. A symmetrical body and dome shaped head is a characteristic feature of Bikaneri camel. Some animals have luxuriant growth of black hair on their eyebrows, eyelids and ears called as “jeepras” in the local market (Rathore *et al*, 1986).

**2. Jaisalmeri:** Origin is Jaisalmer district of Rajasthan. This breed is shorter and lighter, having a small head with a thin neck. They are mostly light brown in color, easy and comfortable for riding purpose.

**3. Sindhi:** It originates from the Sindh province of Pakistan and is mostly found in Jodhpur. The camels of this breed have short, less curved smaller neck. There are two types of Sindhi camels and they are:

a. Muhri b. Laddu

**4. Kutchi:** It is dull in appearance due to heavy weight. They are lethargic in work and mostly used as a companion animal or maintained for fancy purpose.

**5. Marwari:** They are found in Jodhpur district and are heavy with long massive legs, mainly used for transport and not for riding.

**6. Jalori:** It is a crossbred between Marwari and Jaisalmeri, having origin the southern part of the river Luni. The breed is smaller in size and mainly used for transport.

**7. Mewari:** These are found in the surrounding area of Udaipur and Kota districts of Rajasthan. They are smaller in size, compact body constitution, mainly useful as baggage animals.

**8. Shekawati:** It originates in Alwar and Bharatpur districts of Rajasthan. The breed is strong, heavier with good endurance and mainly useful for loading, riding, ploughing and other farm operations.

Exotic breeds of camel

**1. Afghan:** These are good for heavy load bearing capacity with heavy body, thick legs and strong hind quarters having brown, dark brown or even black colored long hairs all over the body. They can withstand cold winters and can live on scanty shrubs available in the hilly areas.

**2. Iranian:** It is a good pack animal, short and stout, with thick hair. The neck is deeply curved and both the head and neck are carried gracefully. They are bred in and around the Seistan desert of Iran being their home tract.

**3. Egyptian:** There are three different breeds of camels in Egypt:

a. **Nile Delta:** They are heavy looking, tall can carry heavy loads and require watering everyday, hence not suitable in water scarcity desert areas.

b. **Bisharian:** They are bred in the Ethai desert, greyish white in color are meant for riding purpose.

c. **Camels of Upper Egypt:** They are light built and body confirmation resembles the Bikaneri camel having very light brown coat.

**Utility of camel:** Camels are mostly used as:

**A. Working animal (Pack animal):** Camels can produce one horse power energy for long duration of work. Camel can carry load to 25-40 % of their body weight depending on the distance traveled and speed for load carrying operation. Camel can travel 100-120 Km in a day with a speed of 25-30 Kms per hour; bearing a load of 200-250 Kgs. Drought animals plough one hectare land with 16 cms deep in two hours.

Thus, camels are mostly used for,

1. Pulling loaded carts and transport of goods
2. Extraction of oil in mills
3. Expulsion of water from deep wells
4. Ploughing cultivable land
5. Crushing sugarcane
6. Transportation

**B. Milk Animal:** Indian camels yield 3.5 kgs to 10 kgs of milk per day. The constituents of camel milk are,

Fat 4.8 %	Protein 3.8 %
Lactose 5.1 %	Ash 0.9 %

The taste of camel milk depends upon availability of plants for grazing. Milk is salty, contains more insulin, hence useful for diabetic patients. Camel milk can be preserved for 2-3 days at room temperature under field conditions. It also contains less fat and more total solids. (Narayankhedkar *et al*). Camel milk has medicinal value and is useful in curing some of the human diseases like jaundice, TB, asthma due to diversified type of grazing. It is also useful in making mawa and khoa. However curd and ghee cannot be prepared from this milk as it contains more of salt and less fat.

**C. Meat animal:** Camel meat is coarse and tough. It is consumed by many people in the Gulf and South Asian countries. Camel meat is similar to beef but the dressing percentage varies from 55-65 % at 2-2.5 years of slaughter age.

**D. Byproducts from camel:** Camel hair has immense important value utilized for preparation of blankets, rugs, fabrics, painting brushes, ropes, bags, mats etc. Camel leather is useful for making shoes and toys. Camel gut is useful for making handicrafts and suturing material.

Camel dung is dried and used as fuel where no other fuel is available. When the camel dies its skin is used for making handles for various fancy articles such as knives, powdered bone is used as "fertilizer". The bones of the legs are used as pegs for tents by the desert dwellers where wood is not available. (Rathore, G. S., 1986).

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