



BIODIVERSITY CONSERVATION IN TRADITIONS AND RITUALS OF RAJASTHAN

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Rajasthan is the largest State of India occupying an area of 342,274 square kilometres. It covers nearly 11 percent of the area of India lying between 23°3' and 30°2' North latitudes and 69°3' and 78°7' East longitudes. In shape it is almost rhomboidal. It is surrounded by Pakistan in the West and the States of Punjab, Haryana, U.P., M.P. and Gujarat in the north, east and south. The presence of the Great Indian Thar desert in its western portion makes Rajasthan a unique State of India. The Thar forms the eastern extremity of the desert belt of the earth. The Aravallis, forming barriers to the desert in the east, are the oldest folded mountain chain of the world. This range not only divides the State geographically into two portions but also climatically different regions, thus affecting the vegetation, mode of life, occupation and culture of the people. The soils of the desert are typical grey brown desert soil containing 90-95 percent sand and 5-10 percent clay, high percentage of soluble salts and high pH value. The climate of the desert zone is characterized by extremes of temperatures, low rainfall, low relative humidity and high wind velocity. The important topographical feature of the desert is the presence of salt lakes in Sambhar. Degana, Kuchaman and Didwana which narrate the past geological history of the area. The Luni is the only seasonal watercourse in this region.

The ancient Aravallis having undergone various stages of erosion, span a long distance of 692 km in the form of alternating hills and valleys, diagonally, across the entire State with Delhi in the north-east and Champaner in the south-west being its two ends. The two extreme points within Rajasthan are Khetri (north-east) and Khedbrahma (south-west) separated by 550 km. Detached from the main mountain range, exists a hill tract in Sirohi where rises Mount Abu with Guru-Shikhar, the highest peak of the Aravallis (1,727 metres above M.S.L.). Between the Himalayas in the north of the country and the Nilgiris in the south, this is the highest mountain.

The rivers in the west and south of the Aravallis are not very large. They extend up to the Arabian sea through the Rann of Kutch. The most important rivers of the State are the Chambal, Mahi, Luni, Banas, Sabarmati and Banganga. In Rajasthan, no natural fresh water lakes are found. The Sambhar Lake, though natural, is a salt lake.

Plant Life in Rajasthan

Of the nine recognized botanical regions of India, three fall in the territory of Rajasthan – the Western Dry Region, the Gangetic plains and the Deccan Plateau. The State



of Rajasthan is rich in floral diversity as 1,911 wild species belonging to 780 genera and 154 families grow here. Gymnosperms are represented by single species only (*Ephedra foliate*). Rainfall and altitude decide the type of vegetation in the different regions of the State ranging from extremely xerophytes scant vegetation of the desert region to the lush sub-tropical evergreen forests of the Abu Hills.

Tribes in Rajasthan

The State of Rajasthan is inhabited by several tribes, namely Bhil, Bhil-Meena, Damor, Dhanaka, Garasia, Kathodia, Koli, Mina, Nayaka, Patelia and Sahariya. Besides these there are some nomadic, Semi-nomadic tribes and de-notified communities also. Nomadic tribes are Bajara, Gadia-Lohar and Kalbelia, whereas semi-nomadic tribes are Rebari, Jogi and Masani. Among de-notified communities, Bori, Kanjar, Sansi, Rabri, Jat and Bhat are included.

Traditions, Rituals and Practices in Rajasthan

The folk traditions of Rajasthan are many centuries old. They have respected nature and made sincere efforts to keep nature in its pristine glory. Unfortunately, many of us under the materialistic glamour of Western culture, have started to forget such conservation concepts. Rajasthan has many emulative traditions and rituals to remedy this malady to a considerable extent. We must, therefore, re-realise and revive those practices in Rajasthan to be able to live harmoniously with the environment.

Tree/Forest Protection

The Rajasthanis still abide by some traditions, rituals and practices which help to conserve and protect trees and forests of which a few are indicted as under:-

(i) **Kesar Chhanta:** In southern Rajasthan, when villagers decide to provide protection to a certain patch of forests, they collect Kesar (*Crocus sativus*) from a temple and on a prefixed date, the village community announces with drumbeat that they gather at a definite point and then proceed to the forest area proposed to be safeguarded against felling and other adverse biotic factors inimical to the perpetuation of the forest vegetation. After reaching the pre-determined spot, they sprinkle Kesar on the trees standing on the outer periphery of the desired forest land. They, thus impose a self-restricting ban on cutting of trees and grazing, etc.

(ii) **Khadana or Saka (Sacrificing Life):** Western Rajasthan is prone to famine and has been so for centuries. This forced the cattle owners to migrate to green pastures in adjoining States each year. Guru Jambheshwariji (Jambhoji) considered the matter seriously and felt that lack of green trees contributed considerably to this distress. He enunciated 29 (20+9 bees+nau) principles and those who followed these principles were declared *Bis-noi*. One of the most important principals that these Bisnois still sincerely practice is not to cut green trees nor



allow them to be cut by others in their areas. *Khejadi* or *Shami* tree is one such tree which is preserved by them at all costs and there are instances when Vishnois laid down their lives to save these trees. Such examples where they offered their life for saving the *Khejadi* tree are known as *Khadana* or *Saka*.

In a village, Ramasadi (Jodhpur), two Vishnoi ladies names Karman and Gauran are on record that they volunteered to be killed to save the *Khejadi* tree on Saturday in *Sanwat* 1661. It is the first known case where people sacrificed their lives in an effort to save trees – an incomparable component of nature. Many *Sakas* followed and the largest and most prominent of these *Khadans* is the one that took place in village Khejadali (Jodhpur) on 12th September, 1730. (*Bhadwa Sudi* 10, *Sanwat* 1787). The Maharaja of Jodhpur wanted large sized trees for some construction work but they were available only in Vishnoi areas. The village Khejadali, not too far from Jodhpur, had many huge sized trees and the Maharaja's men went there to cut them. The Vishnois of this village offered strong resistance and did not permit the green trees to be felled. A Vishnoi lady Amritanji came forward and hugged the *Khejadi* tree and sacrificed Women which included newly married girls. In all 363 Vishnois (289 males and 74 females) laid down their lives but did not allow the gree *Khejadi* trees to be felled. The last words of Amritanji were "*sar santé runk ruke to bhi sasto jan*" (it is a good bargain if a tree is saved even by giving your head).

This instance is enough to prove that our faith and practices upheld living harmoniously with nature. In fact, this is the first **Chipko Movement** (hugging trees to save them from being felled). To commemorate this sacrifice, an annual fair is also held at Khejadali where thousands of people come to pay homage to these great martyrs who gave their lives to save the trees.

(iii) **Oran Culture**: Oran is the distorted form of Aranya which denotes forests. The protection of forests in the underlying concept of this religious faith. In western Rajasthan practically every village had a piece of land of natural vegetation attached to a temple or any religious endowment of a local deity. The cutting of trees and grazing of animals in them was prohibited and they served as a sanctum sanctorum on account of religious considerations.

(iv) **Pavitra Kunjs (Sacred Groves)**: These *kunjs* (tree groves) are observed practically over the whole of the Rajasthan with a preponderance in the Aravalli Mountains. There are three categories of these groves. First category are those sacred groves which are in the tribal village, often near the water source. These forest-like areas are often preserved on hill tops or on hillocks devoted to a local deity, e.g. Bherunji, which are dedicated to Lord Mahadev and Shiva. These aim at the protection of watershed areas. A few instances are Gautemshwarji, Tameshwarji, Jhameshwarji, etc. In the third category fall such groves in which only one species constitute the grove. In Kotra range of Udaipur division, there are many bargad (*vatvriksha*) tree with their aerial roots forming props on the ground and looking like big



groves. Such sacred groves while providing welcome greenery and comfortable climate, also serves as shelters for wildlife and birds.

Veneration of Trees

Trees and plants have been taken as our benefactors and well-wishers for ages. The traditions go on to say that various god and goddesses have their preference for their stay in various trees Tree	Associate God
Peepal	Vishnu, Laxmi, Patradev
Aawala	Laxmi
Gular	Vishnu, Rudra
Kadam	Krishna
Vat	Brahma, Kuber
Palas	Gandharva, Brahma
Karpur	Chandra
Vilva	Shiv, Souls
Neem	Shitala, Manasa, local diety
Ashoka	Indra, Buddha

In order to please lord *Brahaspati*, the banana plant is worshiped. *Aak*, *Nariyal*, *mahuwa* and *semal* are worshipped as symbols of enhanced fertility. *Tulsi* is grown in a specially constructed pot in the courtyard of the home and worshiped. *Tulsi* is also wedded to *Shaligramji* with religious fervour.

Kalpavriksha Fair

In Rajasthan, the *Kalpavriksha* growing in Balund (near Deoli in Tonk District) and Banswara are adored but the importance of three *Kalpavriksha Baobao tree*) along the Ajmer-Beawar National Highway at Mangaliawas has no parallel in Rajasthan, India or the world. A big fair is held on *Hariyali Amawas of Shrawan* (rainy season) to worship.



Shami (Khejadi) Poojan (Worship)

On Dussehra day, there are many recorded instances from former princely states of state worshipping the *Khejadi* tree. In Thar Desert, *Khejadi* is considered as *Kalpataru* because of its multifarious utilities. *Khejadi* has been credited with the qualities of blessings and infertile women with son and this belief has existed for a considerable time.

Gotra Namkaran (Adopting Surname after Tree)

Some tribel particularly Bhils feel honoured in adopting names after particular tree. Some of the surnames are *Salaria* (after salar), *Semalia* (after Semal), *Palasia* (after Palas), *Jamania* (after Jamun) and *Anwalia* (after anwala)

Gram Namkaran (Naming the Village after a Tree)

Some places are named after the preponderance of a particular tree or some incident related with a tree. In Rajasthan, Banswara (after *bans*, bamboo), Kherwada (after *Khair*), Sangwada (after *Sangwan*), Semalwara (after *Semal*), Sariska (after *Siris*) Neemada (after *Neem*) and Peepalu (after *Peepal*) are some examples. Khejadali which is now internationally famous for the *Khandana* of 1730 A.D. has its name after the *Khejadi* tree.

Not Accepting Flowers

It seems strange to many that Jain monks do not accept flowers. This Jain community believes in living in harmony with nature and its various creations. When we pluck out the flowers, the availability of seeds is reduced and there is obvious interference in getting adequate natural regeneration of the plants which results in disturbing the ecological balance.

Recognition of Trees by Government

Governments have also appreciated the traditions of the people and many plants have been given the status of State's trees. In Rajasthan, the *Khejadi* (*Prosopis cineraria*) tree has been declared the State Tree while the *rohida* (*Tecomella undulate*) flower is the State flower. Similarly national tree is "Banyan tree" (*Ficus Benghalensis*) and national flower is lotus.

WILDLIFE PRESERVATION

There are a number of instances of our traditions and practices which contribute to the conservation of wildlife of the State. Some of them are:

Vishnois: The Wildlife Protectors

Following the sermon of not cutting the green trees, this Vishnoi community is an ardent supporter of Wildlife conservation. Because of this *Chinkara* and *Kalahiran* (Indian gazelle and blackbuck) roam freely in Vishnoi village in Rajasthan.



Worshipping Animals

Our forefathers imbibed in us the cause of maintaining biodiversity for environmental congeniality. It is on this age-old faith that we worship the venomous Cobra (*Nag*) on *Nagpanchami*. The appearance of *dumuhi* (Earth boa) snake in the cereal godown is taken as the arrival of goddess of wealth, Laxmi (the Earth Boa feeds on rats which consume large amounts of food grains). On *Goverdhan* day, cows and bulls are honoured while on *Shiva Ratri*, (Nandi bullock) is venerated. On Dussehra day, the *ashwa* (horse) is worshipped.

Vehicles of Gods

To save animals from unnecessary annihilation by men, our ancestors names various animals as the means of God's transport and thus they enjoyed immunity on religious grounds. Some examples are:

Gods	Vehicles
Vishnu	Garud (eagle)
Mahadev	Nandi (bullock)
Ganesh	Musak (mouse)
Kartikeya	Mayur (peacock)
Bhairav	Shwan (dog)
Vayu	Hiran (antelope)
Yama	Bhainsa (buffalo)
Goddesses	Veloo (owl)
Laxmi	Sinha (lion)
Durga	Bagh (tiger)
Katyayani	Gardabh (ass)
Shitala	Hans (swan)
Saraswati	



State Animals

In Rajasthan the *Chinkara* is the State animal while the Great Indian Bustard has been given the honour of state bird. The National Animal is the tiger while the National Bird is the peacock.

EFFICIENT USE OF WATER

Our traditions treat water as god varun. In fact, water is the elixir of life. Notorious for frequent famines, villages in the Thar Desert use each drop of water extremely efficiently. Some of the water conserving devices practiced are:

Tanka Construction

Water is a very scarce commodity in Western Rajasthan. Most of the people make *tanka* for their family. This *tanka* is a pit like well whose steining is stone construction in lime mortar and its catchment is artificially designed in a small sloping area towards the well. This slope is plastered with kankar paste so that the water does not percolate in the soil but travels down to the well through the holes on the steining (wall of the well). The top of the *tanka* is covered with a lid. The water is taken out only for drinking purposes.

Khadin Construction

In scarce rainfall areas as in the Thar Desert, Khadins are made in depressions like small dams. Water as run-off from the rains, collects in them and is utilized for irrigation. In case these bids dry up, crops are grown on it and good harvest is obtained on account of the better moisture regime.

Collecting Water on Roofs

Every drop of rains is useful in the desert region. The roofs of houses are so constructed that the meagre rains that take place are collected on the roofs and from there the water is stored and utilized.

ENVIRONMENT-FRIENDLY FESTIVALS AND RITUALS

There are many festivals in Rajasthan which are common with the rest of the country. These festivals, fairs and rituals, along with local customs, make the pleasure of life worthwhile. In reality, our traditional practices and customary festivals are related intimately to nature and is an integration of these nature oriented and eco-friendly activities.

Gangaur

Gangaur is the festival for praying to *Isvar* (Shivaji) and *Gaur* or *Gawar* (Parvati) so that virgins get a good husband. It is also the practice of ladies and girls to go to gardens woodlots for picnics. The girls carry *Kalash* (metal pots for carrying water) with *durva* keep greenery.



In Jaipur, the *Gangaur Teej* fair is a big attraction for rural as well as urban people and of late foreign tourists are also invited.

Shitalastami

On *Shitalastami* we observe fast, change the *matkas* (earthen pots for cooling water), start *basoda* that is eat stale and cold food and also look after the most ignored and innocent animal or donkey; for it is regarded as the vehicle of *Shitalamata*. This tradition indicates that the Food composition must change to suit the ensuing hot season. The deity is supposed to ward of measles (*bodri mata*), chickenpox (*mata*) and smallpox (*badi mata* or *chechak*).

Akha Teej (Akshyaya Teej)

This is the day when marriages are performed in large numbers and belief is that girls married on this day will have a long wedded life and that they will die as *Suhagins* (death when husband is still alive). In many parts, this is the time when *Kanju-bada* (ground moong or urad fried in oil and kept in earthen pot with water which is fermented with powdered mustard) is prepared. This preparation is an antidote for sunstroke.

Other major festivals, viz., Makar Sankranti, Diwali, Holi, Shivratri and Sharad Purnima are common with the rest of the country.

OTHER ENVIRONMENT CONSCIOUS TRADITIONS

We have always been deriving inspiration from nature and discouraged indiscriminate exploitation of natural resources. Harmless harvesting of natural products has been our motto and air so that sustained yield is ensured for future generations. Some of them are:

Using Biodegradable Products in Functions

In our social functions like marriages and other large-scale party gatherings, we use leaf plates and cups (*pattal dauna*) and earthen Pots (*shakora* or *khullads* for water) instead of plastic articles which do not decompose while the leaf products and earthen utensils get degraded biologically and provide nutrients to the soil.

Swallowing Basil (*Tulsi*) Leaves

In our temples and other religious places, the *Prasadans* given is of *tulsi* leaves along with *charanamrit* (holy aromatic water) and we swallow them rather than chew them. Many disregard this as a superstitious act but doctors have established that these *tulsi* leaves contain mercury which, if chewed, erodes the enamel of the teeth and makes them sensitive to cold, hot and sweet liquids and solids whereas this chemical in the body provides strength.



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