

## “Socio-economic plants used by tribals and nomadic tribes in Shekhawati region Rajasthan”

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### **Abstract: -**

Tribal people residing in the remote areas which are far away from the modern facilities still use plants and plant products for their survival. The study was based on field surveys, personal and group interviews to gather information about socio-economic plants particularly used for household, food, fodder, agricultural implements etc. Present study was carried out in the tribal dominated areas to collect, identify and document some socio-economic plants and their use in

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### **Introduction: -**

In Rajasthan there are 33 districts, 244 tehsils and 44981 villages (census 2011). Rajasthan is divided into 9 regions- Marwar, Mewar, Hadoti, Dhundhar, Shekhawati, Vagad, Mewat, Gorwar and Ajmer state which are equally rich in its heritage and artistic contribution. Shekhawati is a semi-arid historical region located in the northeast part of Rajasthan. The territory derives its name from the Shekhawati Rajput clan scion Maha Rao Shekha Ji, who established his rule in the 15th Century by his bravery and heroism then onwards it's known as Shekhawati region (The garden of Rao Shekha). After Maha Rao Shekha Ji, his offspring succeeded the land with different forms of art and culture for centuries till date. For the present research work, Shekhawati region has been selected. Shekhawati is a painted land of Rajput arts and culture. Shekhawati covered by these two districts are Jhunjhunu and Sikar having 6 tehsils. Shekhawati region having total number of 2129 villages. According to some authors (Sharma.1971; Sharma.1970), from

administratively and geographically point of view, Shekhawati region is limited to only two districts, namely Sikar and Jhunjhunu.

The major religious groups of this region are Hindus, Muslims and Jains. The Hindus are divided into varnas. The first varna is Brahmin (The Brahmins are divided into various social groups like Gujar, Gaur, Gaur Dadhich, Khandelwal, Pareek, Dayma, etc). Second varna is Kshtriya (Rajput) (Rajputs are divided into many social groups like Shekhawat, Chauhan, Rathod, Bhati, and Tanwar). Third varna is Vaisya (Mahajan are divided into Agarwal, Maheshwari and Jain). And the fourth varna is Shudra (Other social groups like Jats, Gujar, Ahirs and Meena are also found in this region. Some occupational social group or caste are Sunar (Goldsmith), Khatis (carpenter), Lohar (Blacksmith), Nai (Barber), Rangrez (dyers), Teli (oilman), Tamboli (Betel sellers), Lakhera (Bangle maker), Raibaris (Sheep or Camel keepers), etc. Here, Muslims are divided into Kayamkhanis, Pathans, Sayyads and Shaikhs.

In this Shekhawati region 7% or below 7% tribes are living here since centuries. The most common tribes are Meena, Dhanka and Naika and nomadic tribes are GadiyaLuhar, Banjara, Kanjar, Sansi, Bhat, Nut, Bauri and Bagri. Khatik, Balai, Nayak or Thori, Bhangi, Megh or Meghwal, Dhankia, Kanjar, Sansi, Bawaria, Nut, Gavaria, Kamad, Mehar, Bhand, Dome, Madari or Bazigar, Rawal, Koria, Bairwa and Koli or Kori are the indigenous people of the Shekhawati region.

### **Material & method: -**

The information's were recorded about the wild plants, which are used for various purposes by the tribal. The data were collected by interviews, observations and participation with the tribals. On researching a village or locality, report was established with one or two persons and contact was then established with other tribals of the locality. Two types of interviews were conducted, firstly of individuals and secondly of groups of individuals. Persons were selected at random on the way or entering in hut, finding out knowledgeable individuals from the village. In group interviews more than one individual were approached and their interviews were taken. Interviews were taken at different sites as and when situation demanded. Materials were packed in polythene bags and brought to the laboratory for identification and further taxonomic descriptions. Plants collected during the surveys were identified with help of published regional floras 14-17 and by comparing voucher specimens with identified herbarium collections in the herbarium. From the collected data to list of different families with their traditional uses for various purposes with family and local name.

### **Observation: -**

## Household items

Each tribe has its own socio-religious-cultural life and prefers to live in a small group in form of a small village, which is generally situated between forests. The houses in these villages are either in form of small huts or kaccha houses made up of mud bricks and walls are coated by mud (Fig.2) a tribal hut is generally constructed near to his agricultural field and often inside the field.

Each tribe has its own socio-religious-cultural life and prefers to live in a small group in form of a small village, which is generally situated between forests or adjacent to it, where there is sufficient supply of natural water in form of river, spring or water holes. The houses in these villages are either in form of small huts or kaccha houses made up of mud bricks and walls are coated by mud (Fig.2) a tribal hut is generally constructed near to his agricultural field and often inside the field. Usually these huts are constructed on a hillock (Fig.3). Rarely, a few tribals may have own two huts, one in the field if it is away. The huts are essentially rectangular constructions with the roof sloping down from a common point beyond the upper ends of the two longer walls of the huts. The roof style prevents overheating by direct scorching sunrays in summers and facilitates the torrential water drops to speedily flow down in rains. A hut usually has one room (sometimes more), separated into 3-4 portions by the large granaries *kubla*. One corner of the hut used as kitchen, an adjacent one-the 'dormitory' while the cattle and the pet animals are kept on the other side. Over the granaries, the several beams on poles/ bamboo fixed horizontally at a certain height to store seeds, cloths and weapons etc. The entry gate is usually in the centre of a long wall, but in some huts the entry gate is through the smaller walls. The huts almost never have windows. The walls and the ground are plastered by clay mixed with cow dung. The walls of the hut are traditionally known as *Barnewali Bheetri*, *Samnewali Bheetri* (the front wall), *Sandari Bheetri* (the back wall) and *Deewal ki Bheetri* (the side wall) respectively. A framework of bamboo is tied parallel to the sloping of roof on either side of opening of the front wall gate. *Phoenix sylvestris* leaves are fixed to form a screen. But there is no opening or gate in the back wall. A bifurcating stout pole of *Anogeissus pendula* used as a central supporting pillar (*mob-walothamba*). Running from the front wall to the rear wall, forming the highest point of the hut is the *mob-ro-adia* (central pole) made of *Haldina cordifolia*. This pole is supported by slightly forking stout poles of *Anogeissus pendula* called *mob walothambo* (or the pillar of *mob*). One such pillar is the inner central pole on which the main beam rests (generally in the middle of the hut interior), and the other is in the rear, also forming one of the ingredients of the back wall. Two other long poles forming the individual peripheral limits of the sloping halves of the roof are also made of *Haldina cordifolia* (like *mob-ro-adia*) and are called *barod ka adia*. These are supported by the forking ends of four pillars at the four ends of the shelter (*daylarothambo*), fixed to the ground and also made of *Haldina cordifolia*. Between *mob-ro-adia* and *barod-*

ka-adia on either side are wall is or dandiyas. The framework of the roof is also made up of *Ficus racemosa*, *Ficus palmata*, *Haldina cordifolia*. *Apludamutica* (grass) is stacked in compact bundles and tied to make the thatch work of the roof. A rectangular screen of *Phoenix sylvestris* leaves with bamboo frame was however, sighted which was tied along one end to a pole shutting the opening of front wall that is the entrance. The hut walls are plastered of mud, wooden gates are seen.



## Articles of Tribal Kitchen

Cups and glasses are traditionally known as a doondlo (The abundance of *Butea monosperma* throughout southern Rajasthan attributes to the widespread usage of its leaves in cupmaking amongst all the tribes. Two or more leaves are sewn with acicular wood chips to make broad cup in which liquid food can be served as dishes. Spoons and ladles are traditionally known as chatu, doiya, dole and ulka. Spoons are carved out of *Wrightia tinctoria* wood almost universally. However, those of *Butea monosperma* wood were also seen. Often *Lagenaria siceraria* fruits of various sizes with a hole bored at the belly of the fruit serve as spoons for not only taking out water from pitchers but also serving liquor. Flour kneading trough is known as Khatto. Kansata, Parato and Sagslota. This trough is usually carried out of the single wood block. Troughs of *Haldina cordifolia* are common amongst Bhill of Kotra region. Grassia troughs are made of *Baswellia serrata* wood, which is also used by other tribes. Churning rod is traditionally known as a ravaiya. Region wise the size of this device varies up to head height; it is made up of the wood of *Wrightia tinctoria*. A long stick is chiseled smooth with a tapering and where two wooden blocks with the long staff is swirled clockwise and anticlockwise by hands a using a string (netar). A simpler churning rod like the one common in some rural areas made of *Zizyphus mauritiana* root or stem through likely to be used in the tribal villages. The elongate root portion (or stem) is submerged in water for some time. At one end it is sliced

longitudinally into four. Spreading the four portions apart, a stone or metal block is pushed in between (removed later). On drying they remain as such. Winnowing pan is traditionally known as hoonpola, sup and supta respectively is made up of bamboo strips. Scrubber is known as noriyal ka sinhara and it is made up of the mesocarp (coir) of *Cocos nucifera* fruits are used for scrubbing pots and scraping away the remnants. Water receptacles and containers are various types such as pitchers or metal vessels, hollow fruits of the bottle gourd and wooden troughs (koondies), which are dug out, shallow wide containers of wood. Pitcher stand is traditionally known as panni and pandini respectively is made up of longitudinally halved hallowed portions of branches or tree trunks of *Boswellia serrata* held in position by two or more bifurcating poles of *Diospyros melanoxylon* were seen in many villages. Mortar and pestle is known as ookhla and sambela or mosaiare respectively. The solid cylindrical pestle is made of *Cassia fistula*, *Holoptelea integrifolia* and *Acacia nilotica* wood. The mortar is either of stone or wood hollowed inside and embedded in the floor of the hut. Stone grinding-mill is known as ghanti. It consists of two circular stones placed in a wooden trough. The handle (dendyo) of the mill is made of *Dichrostachys cinerea* or any other wood.

## **Axe**

An axe carried along may simply has an adorning function. The bamboo (or other wood) handles of such axes are smaller in length and the iron blades larger.

## **Cots**

The Bhillis name for such cots is Karkedu. The timbers entering the frame of the cots, the chief furniture of tribal hut, are many. The legs are usually of *Grewia tiliaefolia*, *Dalbergia sissoo*, *Tectona grandis* and even timbers as of *Butea monosperma* and *Woodfordia fruticosa* enter the frame of cots.

## **Cardles**

Cardles are traditionally known as Panna. Bamboo is the chief material of a cardle-both for forming the framework and its body of woven strips.

## **Fans**

Fan is traditionally known as Bijna. The fans are generally of rectangular shape, woven of bamboo strips one of the smaller sides tied to a bamboo handle. The sizes are variable.

## **Mats**

Mat is traditionally known as Chatai or Path relnu made up of bamboo strips besides *Phoenix sylvestris*. Sometime *Cyperus rotundus* rhizomes or roots for fragrance and cooling effect in summers are woven along especially for mats serving as screens.

## **Baskets**

Baskets traditionally known as Topla made of bamboo are most common. Roughly triangular baskets made of *Derris indica* (stem bark) and *Butea monosperma* (root bark, extracted after steeping the bark in water for a day, were observed. A special flat basket Heernu used for caring the rubble up was seen being used by tribals constructing wells. Pulling the mud through the heernu and lowering it back below. The fibres used were of *Abelmoschus moschatus*.

## **Brooms**

Bamboo brooms are called Khurato or Kharao. The fronds of *Phoenix sylvestris* are also chosen for brooms by the tribals. *Saccharum bangalense* is an important grass for brooms. Slender twigs of plants bundled together and used as brooms generally belong to *Nyctanthes arbor-tristis* and *Malvastrum coromandelianum*.

## **Headrests**

The headrests are traditionally known as Aduni. Leaves of *Tactona grandis* or *Butea monosperma* are rolled and folded to form circular cushion, over which the tribal women place their burdens, whether water pots or stacks of fuel-wood. An aduni may also be woven of *Saccharum bengalense* culms. Aduni of longer duration are knitted of *Cordia gharaf* bark or better fibers like those of *Crotalaria juncea*.

## **Syringes**

Syringes are known as Pichkari. One of the modes of throwing coloured water during the "Holi" festival is by syringes made of bamboo.

## **Paper Storing Cases**

A nearly half a meter long hollow bamboo open from one side serves as a case for preserving papers and a document (as of land). The documents are rolled and inserted inside the case and the open end sealed by a cloth or a wooden piece.

## **Food and Fodder**

Tribal people depend upon their cultivated crops and other products available from the forests. The tribals of the study area mainly cultivate maize, rice, wheat, black gram and green gram. Cultivation in the study area mainly depends upon rains. The tribals still have not been touched by the modern civilization and advanced techniques of agriculture. Although their little need is completed by the agricultural products but

they have to depend on forest produce for their food, vegetable and fodder. Their knowledge about the plants is worth appearing. They are extremely well versed with the plants and they know which is edible. The plants and their parts, which are used by the tribals as food, vegetables and fodder are as follows:

***Acacia leucophloea***

Local name "Ronj"

Family name MIMOSACEAE

Uses - Young pods are used as vegetables and the seeds are ground and mixed with flour. In scarcity besides these, the powder of the bark is reported to add to flour.

***Acacia nilotica***

Local name "Babul", "Bowalia",

Family name MIMOSACEAE

Uses - Gum is used in sweetmeats. Fresh exuding gum is eaten and liked by children. Tribals eat roasted seeds during acute scarcity of food.

***Aegle marmelos***

Local name "Bel" "Billi".

Family name RITACEAE

Uses - Ripe fruits are eaten raw. Unripe fruits boiled and eaten without any other treatment.

***Alangium salvifolium***

Local name "Ankol", "Ankola".

Family name ALANGIACEAE

Uses Ripe fruits are Souris sweet, mucilaginous ripe barriers are eaten.

***Amaranthus caudatus***

Local name Dundi-chandloi

Family name AMARANTHACEAE

Used - Cooked leaves are used as vegetable.

*Amaranthus hybridus*

Local name "Kangani"

Family name AMARANTHACEAE

Used - Seeds are grinding to flour; this flour is used for the preparation of bread.

**Fodder**

Agriculture is the main occupation of tribals of the study area. In addition agriculture milk production is an additional income-generating source for tribals. Tribals of the study area have been facing draught since last few decades therefore fodder for cattles is main problem. Although, some fresh and dry fodder is obtained by the cultivation of certain cereal crops like maize, jawar, wheat, barley etc. But this fodder is not sufficient throughout the year. In form of an alternative fodder (but now a days it is a main fodder) certain plants as such or plant parts are used. Some of the important plants and plants parts, which are used as a fodder, are given below:

*Acacia nilotica*

Local name 'Khejra'

Family name MIMOSACEAE

Plant parts use - Leaves and mature pods.

*Themedaarundinacea*

Local name 'Dhab'

Family name POACEAE

Plant parts use- whole plant.

*Zizyphusnummularia*

Local name 'Jhari-bor'

Family name RHAMNACEAE





### **Transport Vehicle**

The most common and an important transport vehicle are traditionally known as Gado. The various part of this Bullock cart is made of *Acacia nilotica*, *Diospyros melanoxylon*. A mat is used to carry additional material also made of strips of *Butea monosperma*.



The resultant of threshing (i.e., the grains and husk mixture) is generally allowed to drop from a bamboo basket or winnowing pan, in the presence of sufficiently blowing wind, by a person standing on a wooden log or stand.

### Field Fences

Although improved techniques are available. Tribal still uses brushwood and thorny branches as a safeguard against cattle intrusion in his farm (Saxena, 1981) for obvious reasons. Fencing the boundaries of their field to protect the crop live plants or branches of a single species or two or more ledges of *Butea monosperma* and *Diospyros melanoxylon* are used. Such fencing of stout wooden logs is common in areas with timber resources. Live fencing of *Jatropha gossypifolia* were found interspersed with *Delonix elata* shrubs and branches of *Zizyphus xylopyrus*.

## **Plants Supported by Fences**

The fences generally are strewn with cucurbitaceous cultigens like *Coccinia cordifolia*, *Lagenaria siceraria* (fruits seen in various stages of development) and *Lablab purpureus* (an almost usual feature) important vegetables. Perhaps for the aesthetic value of their scarlet rate fruits, plants of *Trichosanthes bracteata* allowed to grow.

## **Frightening Devices**

### **Scare Crows**

As in rural communities elsewhere the use of scare crows (*Kakbhagoda*, *bijuka*, *ujka* and *howaz* etc.) is also in vogue in this tribal region, which are called *mannis*. As far plant usage, sticks of any root are diagonally fixed there being no particularly important species. A clay pot, straw and cloth form the accessories.

### **Hoda**

A stick is planted in the ground with in the crop field. Over this and covering it up side down in it hung a metal can, with the moving gusts of wind the can, hangin with a string swings to and fro striking against the stick. The rattling din frightens away the birds. Such a device is also hung near fruiting branches of fruit tree like mangoes by *Bhils* in *Kotra*.

### **Petia**

A string made of such species as *Crotalaria spectabilis* to which a stone has been tied is swung round and round to derive of birds.

### **Gophan**

An improvement of the *petia* is the *gophan*. It is made of *Abelmoschus moschatus* or any other fibers woven into a rope with a broad netlike collar at one end. Holding the rope at other end, and keeping a stone in the

collar the farmer climbs up on a high point in the field (e.g., the watch place) and swing it in circle with gathering speed. The birds fly away from the whirring sound made by circularly moving stretched string, cutting the air. Aiming and maneuvering, the stone may be release as projectile to bring down the pests.

## **Bins for Storage**

The main occupation of tribals is agriculture and they use to store grains for long time for floor as well as seeds for next season. They store these grains in granaries traditionally known as Kabla, Kothi or Kubla. These grains bins generally made of plant materials frame work plastered with clay. *Dendrocalamus strictus*, *Nyctanthes arbot-tristis*, (stem) *Butea monosperma* (root) and *Bauhinia recemosa* (stem) are mainly used for this purpose. After storage of grains initially the lid of granaries is not sealed but after drying of grains the lid is sealed by mud but a hole is present at the bottom of granary for drawing grains out. This hole is temporary sealed by especially wooden man lid. Sometimes grains are placed in bamboo baskets and stored at a high place in the tribal hut or on the roof of hut in open place. In addition to this sometimes fruits *Lagenaria siceraria* serve as storage bottles, known as kholru they are hug from a peg or any other thing. On drawing for 2-3 months, the contents of the fruit shrivel. Forcing an opening somewhere near the stalk these are away evacuated by shaking. A Kholru can bwe seen in many tribal huts contained *Abelmoschus esculantus*. *Cucumis sativus* and *Cucubitoschata*.

## **Kitchen article**

### **Agricultural articles/ implements**

## **Acknowledgement**

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