Biocultural Community Protocol of the Camel Breeders of Rajasthan



Sadri, 2 November, 2017 Drafted by Lokhit Pashu-Palak Sansthan www.lpps.org

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Summary

This is the Biocultural Community Protocol of the camel breeders of Rajasthan which puts on record our role as a local community embodying a traditional lifestyle that is relevant for the conservation and sustainable use of biological diversity. We have stewarded and taken care of Rajasthan's camel population for generations and our traditional knowledge and practices as well as customary rights are the foundation of Rajasthan's camel culture and biodiversity.

In this BCP we describe the traditional knowledge that we have used to manage Rajasthan's camel population over the last few centuries but which cannot be taught through books, only through practical experience.

These are the reasons for the decline of the camel population since around 1993:

Disappearance of grazing areas, through closure of forests for camels, sheep and goats (such as Kumbhalgarh Wildlife Sanctuary), intensification of agriculture (tubewells), irrigation schemes (Indira Gandhi Canal), etc.

Spread of diseases - We have lost many camels to mange (a skin disease caused by mites) and to unknown diseases. Veterinary services are available only in the hospitals or during camps, but our camels get sick throughout the year and require immediate treatment and disease control.

No economic returns due to

- Absence of buyers for our male camels at the traditional markets, such as the Tilwara, Pushkar and Nagaur Fairs, because of prohibition to take camels out of Rajasthan. This situation has developed gradually, but it became much worse after the camel was declared state animal and the "Camel Bill" was passed in 2015.
- Absence of system for processing and marketing camel milk. Our camels have a lot of milk, but currently there is no marketing system and cold chain available.

Our situation has become worse since the camel was declared "state animal" by the Government of Rajasthan in 2014. The ensuing legislation made our situation worse as it prevents us from making economic use of our camels. It was made without consulting us and without our prior informed consent and it is against the objectives of India's Biological Diversity Act (2002) which supports the conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising from use of biological resources. In the case of agro-biodiversity, conservation and sustainable use cannot be achieved by banning economic activities. Across the world, scientists, as well as farmers and pastoralists concur that conservation and continued evolution of agricultural biodiversity is only possible through their in-situ use.

We suggest the following interventions

Establishment of official camel grazing areas – which are also biodiversity hotspots - to
ensure that there will be a source of food for our camels in the future (through Forest and
Revenue departments).

- Support for setting up of camel milk collection and processing points near our grazing areas
 and development of a cool chain network to transport the milk to the consumers (through
 Rajasthan Cooperative Dairy Federation, subsidy/loan programme, private investment).
- Veterinary treatment of our camels in the field, instead of only in hospitals, by the
 Department of Animal Husbandry.
- Investment in the design, manufacturing and marketing of products made from camel raw materials, such as wool and poo through Department of Rural Development
- Promotion of camel products in Rajasthan's many heritage hotels by the Department of Tourism and Rajasthan.
- Establishment of export market for camels and their products, and especially for male camels that are in excess in Rajasthan and for whom there is no domestic market.



Abbreviations

A.D. Anno Domini

BMC Biodiversity Management Committee

CBD Convention on Biological Diversity

COP Convention of the Parties (

LPPS Lokhit Pashu-Palak Sansthan

PBR Peoples' Biodiversity Register

RCDF Rajasthan Cooperative Dairy Federation

V.S. Vikram Samvat



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Introduction

We are the camel breeders of Rajasthan, and most of us have herded and bred camels for many generations with the help of our traditional knowledge that we passed on orally. We have developed this community protocol because we are concerned and worried about the pressures on the camel population and our inability of making a livelihood from camel breeding.

We are aware of India's Biodiversity Act, 2002, that seeks to ensure the conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising from use of biological resources. According to the Act, it is **Biodiversity Management Committees** (BMC) that are tasked with establishing Peoples' Biodiversity Registers (PBR). But our case – and that of other pastoralists – does not fit into this system because we move from place to place, so **which BMC can provide us our rights?** At the same time, all of us camel breeders share the same problems, so we have prepared this **Biocultural Community Protocol (BCP)** in which we are putting on record our role as a *local community embodying a traditional lifestyle that is relevant for the conservation and sustainable use of biological diversity. We have acted as stewards and caretakers of Rajasthan's camel population for generations and our knowledge, practices and customary rights are the foundation of Rajasthan's camel culture and biodiversity.*

In our BCP, we describe the problems we have had over the last couple of decades and which have worsened since the camel has become state animal of Rajasthan in 2014 and we suggest interventions that would support conservation and sustainable use of the camels of Rajasthan.

Who we are

We belong to several different castes, such as Raika/Rebari, Rajput, Muslim, Bishnoi, Jat, Gujjar and others. We all share a sense of responsibility and love for the camel and have passed on herds of camels from generation to generation for many years, often centuries. Among us the Raika are the people with the closest relationship to the camel as their ancestor was created by God Shiva to take care of the first camels.

The Raika origin myth

Shiva was meditating. Waiting for him to be finished, his consort Parvati started shaping animals out of clay to pass the time. She created one particularly strange creatures that had five legs. The she asked Shiva to blow life into it. He refused, saying that such a misshaped animal would be beset by a host of problems. But Parvati continued begging him. Finally, Shiva gave in. He folded the fifth leg over the animal's back and then said 'uth' – get up. The camel got p and walked away. After some time it started creating a lot of nuisance. Parvati once again came to Shiva an asked for his help. She requested him to make a man hat could look after the camel. Shiva then rolled a bit of skin and dust from his arm and out of this he made the first Raika. Census of Rajmarwar (1896).

Area

Rajasthan is a state in the west of India. Its western part is composed of the Thar Desert and is arid and semi-arid. Its eastern part is sub-humid farmland. The two parts are separated by the Aravalli Hills which are covered by forests. Camel breeding is practiced throughout most of Rajasthan, although it is more important in the low rainfall western districts (Barmer and Jaisalmer) than in the eastern parts. This is because the camel does better in dry than in humid environments.



Community

Although we belong to different caste communities, we share a common identity and support each other across caste and religious lines. For instance in Jaisalmer district there are Rajput, Raika, Muslim and Bishnoi camel breeders and they all collaborate at the beginning of the rainy season to collect free-ranging camels and bring them to the temple of Kachu Fakir where they are then redistributed to their owners. Here they pray for the good health of their livestock. A fair is organized in honour of Kachu Fakir on Badwa Beej of the Hindu calendar.

Kachu Fakir

Kachu Fakir was a camel grazer at the time of Maharawal Jawahar Singhji. He was famous for being able to able to identify the pug marks of camel and trace them. There are a lot of stories detailing the virtues of Kachu Fakir. Once, while he was on his daily stroll with his camel, he came across a group of seven men that were tired and hungry. They requested Kachu Fakir to feed them with camel milk. Fakir's camel was not mature enough for milking but he did not refuse their demand. He milked his camel and was surprised to see that it started giving milk. He gave milk to all seven people till they were fully satisfied. Every year a fair/mela is organized in his memory. People bring their camels on the dargah and pass them under Kachu Fakir's tanti to get the blessing so that the camels may remain healthy. Camel breeders meet here twice yearly, on Mah ka beej and on Badwa ka beej - two days after full moon)

Each one of our caste communities has its own governance system. Among the Raika it is a multitiered system of panchayats (council of elders) that makes decisions, but these days these relate only to social issues, not to camel and livestock questions.

With the help of LPPS we have organized into "Camel Breeders Associations" in Godwar and in Jaisalmer.

The origin and history of the camel in Rajasthan

There are many stories about the origin of the camel and how it came to Rajasthan. The most well-known is told by the Bhopas (wandering ministrels) of Pabuji Rathore. Pabuji was a *thakur* (landlord)

from Kolumand, near Pokaran, who lived in the 14th century. He once promised his niece that he would give her "rati-buri-sant" (red and brown she-camels) when she was in the process of getting married to Gogaji, even though he did not exactly know where to get these animals. He asked his friends for support and one of them called Harmel Raika accepted the challenge. Harmel Raika crossed the seven seas to "Lankia" and stole a herd of camels from Ravana. For this reason, people believe the camel came from Sri Lanka.

It is important that the emphasis in the story about Pabuji is on female camels, which were said to be unknown then in Rajasthan. It is likely that the capture of these female camels enabled the people in the Thar desert to themselves start breeding camels.

However, the Charans (story-tellers, record-keepers) working for the Muslim community have a slightly different version of this story. According to Tejdan Charan and Prof. Zahoor Mehar from Jodhpur University, Pabuji tried to steal the camels from Sayrah Bhagani, the Nawab (ruler) of Mathela. These were grazing in a tree-studded plain near the village of Lankra which is located 12 km from Umarkot. They were taken care of by Jatts. Pabuji and Sayrah Bhagani started fighting with each other, but in the last minute, a Charan exchanged their turbans which meant that they had become like brothers. Sayrah Bhagani then offered the red and brown she-camels to Pabuji as a gift. Pabuji refused as he had nothing to give in exchange. Then Sayrah Bhagani suggested that he gift him the Charan. Pabuji agreed and ever since the Charans are respected by both Hindu and Muslim communities. This event is dated to 1321 V.S. according to the Charan.

The latter version makes more sense as camels have historically never occurred in Sri Lanka, whereas it is known that camels were introduced into Sindh in 717 A.D. by Muhamed Qasim who was accompanied by 3000 camels on his invasion. It is also historically attested that the Afghan invaders that regularly looted India starting with Mahmud of Ghazni in 997 A.D. passed through Jaisalmer and used thousands of camels to carry water to cross the desert.

From the 12th century onwards, and maybe earlier there is evidence that the camel was used for trade as is shown in the stela at the temples of Kiradu in Barmer district which are dated to the 12th century.

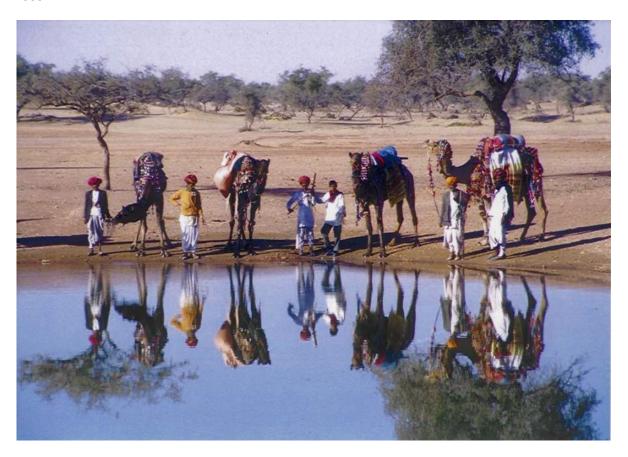
In the 16th century, Mughal emperor Akbar and the Maharajas of Rajasthan established camel corps for warfare. The Maharajas had camel breeding herds (tolas) which were looked after by the Raika.

In 1889, Maharaja Ganga Singh of Bikaner set up the famous Ganga Risala composed of 500 men and camels which was integrated into the Imperial Service Corps and served in the Near East, Egpyt and other countries.

In the 1940s, after Independence, the Maharajas dissolved their camel breeding herds and the animals were taken over by the Raika. In the mid 1900s, the two-wheeled camel cart equipped with used airplane tires became popular and made the camel into a popular and indispensable draught animal. There was much demand for camels to pull these carts, and in the 1960s, the camel population peaked at about 1.1 million, but started to decline in the early 1990s.

In 2001, Bagdi Ram Raika, leader of the All-India Raika Association, became aware that camels were sold for meat during the Pushkar fair and requested the help of LPPS to stop this. But nobody believed or paid any attention to this. In order to raise awareness about this situation LPPS and a

group of Raika undertook an 800 km long Camel Yatra from Sadri to Jaisalmer and Bikaner in January 2005.



In 2007, a delegation of Raika participated in a UN level conference on Animal Genetic Resources held in Interlaken in Switzerland to make the point that pastoralists are the guardians of livestock biodiversity. They also travelled to Germany and Spain. In the following years, Raika leader Mrs. Daylibai participated in the COP of the Convention on Biological Diversity in Bonn, Germany, and at a CBD meeting held in Montreal and

In April, 2008, LPPS organized an international seminar entitled "The camel in Rajasthan: From heirloom to unique selling point" in Jaipur which was attended by camel breeders from all over Rajasthan as well as by international camel dairy experts from Dubai and Europe.



In 2010, LPPS and Jaisalmer Camel Breeders Association organized a national consultation in Khabha.



Finally, in October, 2012, the 19th Livestock census revealed that the Indian camel population had declined by 22.48% since 2007 and that 325713 camels were left in Rajasthan. http://dahd.nic.in/sites/default/files/Salient%20Features-19th%20Livestock%20Census(English)%20%203.pdf

In reaction to this, the camel was declared state animal of Rajasthan on June 30th, 2014 by the cabinet. In order to implement this status and because of a strong push by animal welfare groups, the Rajasthan Camel (Prohibition of Slaughter and Regulation of Temporary Migration or Export) Bill was passed by the Legislative Assembly on March 27th, 2015, although the Raika had cautioned against this move in several letters and representations. This law prohibited the export of camels from Rajasthan across state borders as well as the use of camels for meat.

Soon there were frequent reports in the media about camels being sent for slaughter, rescued by animal welfare groups and being transported back to Rajasthan.

From 5-7 November, 2015, the first Marwar Camel Culture Festival under the patronage of HH Maharaja of Jodhpur was organized by LPPS on its campus and featured panel discussions with camel breeders and decision makers.



In 2016, a limited market for camel milk was established by two companies. On May, 30th, a delegation of about 10 Raika from Sirohi, Pali, Jaipur, Alwar, Bhilwara meet with Secretary of Animal Husbandry Shri Kunjilal Mina, IAS and Director of Animal Husbandry, Shri Gupta, Dr. N.M. Singh (responsible for camel issues) and emphasized their need for camel milk marketing. The Secretary explained a government plan to give Rs. 10,000 for each camel baby born. He also stated that only the private sector can efficiently market products, not the government.

Currently, in 2017, the market for male camels has totally fallen apart. The Tilwara fair has been closed for camels. Many of us have not sold a single camel in the last three years, meaning that we have had no income from camel herding. We can no longer continue in this situation and will have to give up camel breeding and herding, unless a strong market for camel milk develops and there is the infrastructure to get it from our herds to the consumers.

Our relationship with the camel

We look at camels as if they are our children and we never used them for meat or sold them for slaughter. Traditionally we never sold camel milk either, as we believed it was to be given away for free. A common proverb is "Dudh bechna, beta bechna", meaning to sell milk is like selling one's children.

In the Raika community there was a ban on selling female camels to anybody outside the community. There was also a belief that one should not process the milk of the camel and instead consume it fresh.

Another old proverb is "mero ko jin gao panaye.....meaning "Marry me into a village with many shecamels".

However, now the times have changed. It is difficult for a camel breeder to find a wife and we are aware that we now have to sell camel milk in order to make a living.

Our camel breeds

There are many different types of camels in Rajasthan, each suited for specific purposes, such as draught animal, for riding and racing and for milk. Scientists distinguish at least six different camel breeds in Rajasthan, such as Bikaneri, Jaisalmeri, Marwari, Mewari, Mewati, Malvi breeds. However, we look at camels differently and know them after the villages they were bred and the herds they come from.

In Jaisalmer district we distinguish the following camels:

Bhala/Thalli

They are named after Bhala village near Nachna in Jaisalmer district. In olden times, a camel was brought from Pakistan to Bhala village in exchange for male goats. The offspring born from this camel came to be known as Bhala breed. This breed is dusky oily black in colour. It is tall and strong enough to carry heavy loads. The female

camels of this breed give 5-7 litres of milk. Female camels of other breeds were very commonly crossed with Bhala breed male to get Bhala. This breed has become practically extinct after irrigation By the Indira Gandhi Canal started. Many camels drowned when the canal was first built.

Lunar /Sodha

This variety was found in Lunar village of Sodhan area. It occurs in the villages along the Pakistan border, also in Khabha. They are very fast and good runners. They are of fairly small size but very beautiful. They are of red or black colour.

Jaiselmeri/Magra

This breed is the best. It has been developed from Tharparkar camels of Sindh area of Pakistan. Jaisalmeri variety is red and brown colour. They are fast runners with thin and lean appearance. In addition, this breed is preferred for patrolling in desert area. The Maharawal of Jaisalmer owned 5000 camels of this breed and the Nachna Thakur also had famous camels. Until the 1970s, all the camels of the Maharawal were assembled at Diwali on the sqaure in front of the Jawahar Vilas. At this time, the young camels were branded with the nishan of the Maharawal. Also, the best camel care takers were given awards.

Other famous camel herds are or were in Sanchore and in Jojawar (Pali district).

We have always bred camels for certain qualities and selected male breeding camels with great care. The points we look at are height, beauty and posture, milk yield of the mother and female relatives, and character. Our camels are the tallest in the world.

Management

As breeders, we keep herds composed mostly of female camels, with one male camel for breeding. The young male camels we used to sell at fairs such as at Pushkar, Tilwara, Nagaur and other places. All our camels have names, but all camels of a female lineage have the same name. In addition we give them nicknames. Our herds live entirely on natural vegetation.

The management system differs between places. In the low rainfall zones in Barmer and Jaisalmer districts where agriculture was practiced only during the monsoon, we let the camels range unsupervised during part of the year. In areas where crop cultivation is important, for instance in Pali district, we herd the camels throughout the year. We distinguish three different seasons.

Winter

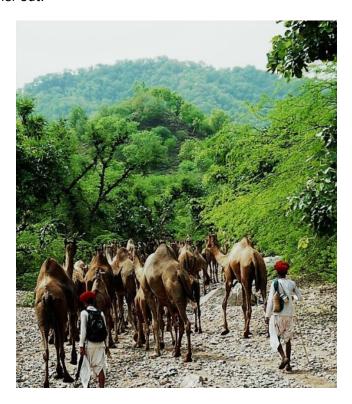
The winter starts after Diwali and lasts until Holi. During this time, the breeding takes place. The male camels are in rut and the young camels are born. This requires supervision from us. The male camels in rut stop eating, but drink about 20-30 liters per day. They require more care and attention in this season as they get excited and become difficult to manage. Consequently, they are not set free for grazing in this excited mood. In this state, a male camel might fight with another male camel and kill it.

Summer

In summer, camels drink about 40-50 litres of water per day, but under certain circumstances, they may not be able to drink for several days. However, prolonged absence of water might cause the camels to fall ill. In the morning, they may be given` wheat dhalia' to keep their body balanced to hot climate. The common diseases found in camel during this season: stomach ailments and the `Paa'. Both the diseases can be treated with ethno veterinary treatment.

Rainy season

During the monsoons, we herd our camels to prevent them from destroying crops. Together we round up all the camels that we can find, irrespective of the ownership and gather them at a common field. Each livestock keeper does the same and thereby gathering all the animals at the predecided time and place. This joint effort involves livestock keepers from all communities, helping each other out.



Camels and biodiversity

Our camels browse mostly on the drought resistant trees and shrubs of the desert, or, in the rainy season, the trees of the Aravalli Hills. They also graze on the salt flats that can be found near Jaisalmer and, in cultivated areas, they like the thistles (unt-kantalo) that grow on fallow fields.

According to a traditional saying, camels browse on 36 different plants, although the number is not exact and the trees and shrubs vary from location to location. They have been identified for the Kumbhalgarh area, but in Jaisalmer they are different. Almost all of the plants that camels eat are known for their medicinal value and are used in folk medicine.

Camels learn from their mothers which trees and shrubs to feed on, so it is difficult to move them between different eco-systems. A camel raised in the desert will have difficulties feeding in the Aravalli Hills.

The types of plants that the camels feed on determine the taste and quality of the milk. Some plants, such as bordi and unt-kantalo make the milk sweet, others such as neem make it more bitter and salty. An experienced herder can tell from the taste of the milk which plants the camels have fed on.

Our camels are so habituated to browsing on their own that it is difficult for them to be stall-fed.

By browsing, the camels disperse the seeds of many of the trees and shrubs and help them germinate. Our observations in the Aravalli forests tell us that browsing by camels actually stimulates the growth and branching out of trees.

Because of these habits of our camels, we can keep herds only where there are large patches of "jungle" and uncultivated lands or orans (community protected sacred groves) for the camels to feed on. There is a connection between camels and biodiversity and larger breeding herds can only be kept if there is a forest or oran nearby. Examples of such locations are in Isra in Sirohi district (where there are maybe a thousand camels), around the Kumbhalgarh Wildlife Sanctuary in the Godwar area of Pali district, Dhola Raoji near Bassi in Jaipur district, several places in Bhilwara district, the Jor in Barmer and the Rasla oran in Jaisalmer district, although this list is not complete.

We believe that camels, biodiversity and the beneficial quality of camel milk are connected and interrelated. We strongly believe that the milk from camels (and other animals) that feed on 36 plants is much healthier than that from stall-fed animals.



36 camel forage plants may make Rajasthan's camel milk the best in the world

Our traditional knowledge

We spend our lives observing camels and their interaction with plants, soils, landscapes and the weather. This knowledge is the result of daily exposure and long experience and it cannot be learnt from books, nor even documented in books, although a young person can learn from older camel herders.

- We know about the different types of camels and we know the qualities of each camel in our herd and its social and genetic relationship with the other camels. We select male breeding bulls carefully, taking many factors into account, such as height, colour, temperament and character as well as the milk yield of his mother and female relatives.
- We know about the effects of plants on the health of the camels and on the quality and taste of the milk.
- ➤ We know how to keep camels healthy by moving them around, taking them to specific grazing areas, changing the night resting places regularly, inspecting them for wounds every morning and treating these immediately.
- ➤ We have our own camel disease classification system, and we used to make our own medicines to treat the camels from plants that we collected. We had a system of treating sick camels with a hot iron which often produced good results. However all this knowledge is disappearing fast and we have also come to rely more on commercial medicines which often lose their power after a short time, such as the injections against mange.



Threats to the camel

The camel population has been declining since around 1993. We hold the following factors responsible:

- Disappearance of grazing areas, through closure of forests (such as Kumbhalgarh Wildlife Sanctuary), intensification of agriculture (tubewells), irrigation schemes (Indira Gandhi Canal), road construction, urban sprawl, fencing. This means that our camels do not have enough to eat and are hungry, making them vulnerable to diseases, and slowing their reproduction.
- Spread of diseases, especially mange and trypanosomiasis. We have lost many camels to
 mange and to unknown diseases. Veterinary services are available only in the hospitals or
 during camps, but our camels get sick throughout the year and it is not possible for us to
 bring sick camels to a hospital.
- 3. Absence of buyers for our male camels and closure of traditional markets, such as the Tilwara Fair. This situation has developed gradually, but it became much worse after the camel was declared state animal and the Camel Bill was passed in 2015. Since then we have not been able to sell our young animals and lost the income we previously had. This means that we can no longer afford to take good care of our herds, and that our sons cannot go for this profession but have to look for work elsewhere.
- 4. **Absence of system for processing and marketing camel milk**. Our camels have a lot of milk, but currently there is only the Kumbhalgarh Camel dairy that officially accepts camel milk and pays us a decent price. The Rajasthan Cooperative Dairy Federation does not accept camel milk officially, and as it pays based on far content, we only get a very low price.

Our Efforts at Conservation

Traditionally we never sold female camels because we wanted to pass them on to the next generation. In Raika society families that sold female camels were outcasted. But times have changed. Young people no longer want to keep camels because there is no income from them and because it is very hard work looking after them. Often they tell us older people to sell our camel herds. We have refused to do that, because they are part of our lives and family heritage and we feel responsibility for their well-being, just as if they were our friends. But now we have had now income at all for the last three to five years. How much longer can we go on with this?

Opportunities for the camel

We realize that there is almost no demand for camels as draught animals. And selling camels for meat is illegal. But we have become aware that there is a quickly growing market for camel milk because camel milk is very healthy as we have always known. It is good for people with diabetes and helps autistic children. It is beneficial for skin and liver diseases, and it strengthens the immune system, some research shows it is also effective for cancer and maybe even AIDS.

Our camels can provide a lot of milk, but the Rajasthan Cooperative Dairy Federation is currently not accepting any camel milk officially. If we sell it as generic milk, because the RCDF (Rajasthan

Cooperative Dairy Federation) pays based on fat content, the price we receive is very low, only around Rs 20/Litre. But in Delhi and other cities, camel milk sells for Rs 300/litre and more.

We want to be connected to the camel milk market and for that the infrastructure including a cool chain has to be established. It is also possible to make powder from camel milk for which there is a good market demand but currently no such facility exists in Rajasthan, only in Gujarat.



As our camels feed on natural vegetation including many medicinal plants, their milk is very healthy. We milk only by hand and make sure the camel baby gets enough milk. We want to market our camel milk as a health food that is from free-ranging camels.

Secondly, there is demand for camels from other countries, and if we could sell our male camels to buyers from outside India it would create income for us and provide incentives for breeding camels. Besides obtaining cash from the sales, income could be generated from Access and Benefit-Sharing arrangements as has happened with the sale of embryos from Gir cattle to Brazil (see below).

Access and benefit sharing (ABS) provisions under our legislation

As explained above, our forefathers have developed the different types of camels we have in Rajasthan and we have developed and until now stewarded this part of Rajasthan's agrobiodiversity in line with the goals of India's Biological Diversity Act, popularly known as "Biodiversity Act".

The Biodiversity Act has provisions for Biodiversity Management Committees (BMC) that have the mandate to establish People's Biodiversity Registers (PBR) that document the biological resources and chronicle knowledge relating to biological resources at village level. But BMCs and PBRs are restricted to the geographical boundary of village, taluk or districts. However, we as pastoralists move from place to place to the source of food for our camels, so which BMCs can provide us our rights and document our biological resources and traditional knowledge?

For this reason we have established this Biocultural Community Protocol which documents the camel biological resources and traditional knowledge of the camel breeding community of Rajasthan as a whole.

We unanimously state that the current ban on the trade of camels, across state and national borders is detrimental to the survival of our camels and is against the objectives of the Biodiversity Act. It is well known that conservation and sustainable use especially in case of agro-biodiversity cannot be achieved by strict banning. We as a country have already lost thousands of rice varieties due to its underuse. It is high time that authorities understand cultivation or breeding is one of the many ways for conservation. A trade ban for camels means loss of livelihoods for us as a pastoralist community.

The National Biodiversity Authority has the mandate to regulate the access and ensure equitable sharing of benefits obtained from use of biological resources. The use mainly includes "commercial utilization" (which excepts conventional agricultural uses such as dairying) and research using India's biological resources. Although regulation for access is mandated in the Act, there is no restriction (excepting the species under threatened category) for the use of biological resources including plants, animal, micro-organisms etc. One of the classic examples of Access and Benefit-Sharing from animal resources comes from the trade of bovine embryos between India and Brazil¹. This illustrates the potential of trade and subsequent benefit sharing to enhance our livelihoods and thereby promote conservation and sustainable use of camels.

http://164.100.47.194/Loksabha/Questions/QResult15.aspx?qref=18571&lsno=16 Government of India, Ministry of Agriculture, Lok Sabha, unstarred question no: 6320, answered on: 05.05.2015 extinction of Ongole bull PonguletiSrinivasa Reddy

http://nbaindia.org/uploaded/Approvals/FORM%20_I.pdf (Serial No. 73, Application No. 559, agreement signed on 15.04.2016)

¹.Although there has been trade of cattle embryos with Brazil even before the enactment of the Biodiversity Act, the approval for access to 4000 bovine embryos of Ongole, Gir and Kankrej applied by M/s. Brasif S.A, Administracoes e-Participacoes, Rio de Janeiro, Brazil in 2012 was granted after the Access and Benefit Sharing agreement between National Biodiversity Authority and applicant. The guidelines on ABS Regulation notified in 2014 mandates the users to pay certain benefit sharing amount to the "providers" of the resources.

This Act does not ban the use of biological resources, especially agro-biodiversity, but mandates the access and use to be accompanied by benefit sharing agreements. Further, local body or provider of the biological resources or holder of traditional knowledge relating to trade has to be consulted before the national or state authorities grant approval for access. As there is currently neither a State Biodiversity Board nor any BMC that represents our interest, we request our camel breeders associations (as currently exist in Jaisalmer and Godwar areas of Rajasthan) to be contacted via Lokhit Pashu-Palak Sansthan.

We emphasize that we cannot go on performing the role of stewarding Rajasthan's camels any longer without some kind of support by government and society, as we have to make a living too. If the people of Rajasthan and India want to save the camel and **access** its products at any point in the future, then we require that benefits are shared with us NOW, otherwise the camel will become virtually extinct from Rajasthan. We request the following benefits to be shared with us:

Request for Interventions

- We request that official camel grazing areas are established and protected, so we are sure that there will be a source of food for our camels in the future. We can help identify the most important spots and commit to managing them in a sustainable manner.
- We request help with the setting up of camel milk collection and processing points near our
 grazing areas and development of a cool chain to transport the milk to the consumers. We
 request training of our youths in processing camel milk hygienically and to highest standards.
- We request a change of practice in the Animal Husbandry department to treat our camels in the field, as it is impossible for us to bring them to the hospital for treatment.
- We request investment in the design, manufacturing and marketing of products made from camel wool and camel poo, so that these raw materials can become a source of income for us.
- We request that Rajasthan's many heritage hotels use and showcase camel products, including beverages made from camel milk and soaps from camel milk.
- In the future, if policies are made that concern our camels, we request to be asked for our prior informed consent rather than listening to other stakeholders that have no experience in managing camels and know nothing about them.



APPENDIX

Process of developing this BCP

The development of this BCP was initiated by Lokhit Pashu-Palak Sansthan, an NGO based in Sadri, Pali district that has been working with the Raika community since 1996 and has several Raika board members, including Dayalibai Raika. After the development of the Raika Biocultural Protocol initiated by Natural Justice in 2009, the idea was conceived to develop a BCP with the Jaisalmer camel breeders where LPPS was working at the time. An initiation meeting was held in Jaisalmer in 2011, attended by about 40 camel breeders representing the different communities. This was followed by a number of meetings in the field, and documentation efforts of LPPS local staff. In December 2012, camel breeders from Jaislamer participated in an experience sharing workshop on BCPs at LPPS. https://ikrweb.wordpress.com/2012/12/16/biocultural-protocols-livestock-keepers-confirm-the-importance-of-this-tool/

The draft BCP s was discussed and validated by the community in January 2013 - https://ikrweb.wordpress.com/2013/01/16/jaisalmer-camel-breeders-put-on-record-rights-and-resources/ . For various reasons, the process could never be completed. In 2017, at a meeting of camel breeders from all over Rajasthan held at LPPS headquarters it was decided to develop a BCP for all camel breeders of Rajasthan, as the community is subject to the same pressures brought on by the camel becoming state animal and the subsequent legislation. The original document already validated by the camel breeders of Jaisalmer was expanded to reflect information from all other parts of Rajasthan.

List of Meetings (not complete)

October, 23rd, 2011: Meeting in Jaisalmer to initiate BCP process

January, 14th, 2013: BCP validation workshop in Jaisalmer

2015

9th June: Meeting near Gangapur, with herders from Kakermala (Bhilwara district), Naryan s/o Madaji, Danji s/o Madaji and 4 others, owning more than 100 camels between them.

10th June: Meeting with Kalulal Gujjjar, s/o Bhagwanlalji Gujjar from Seti village, near Chittorgarh – camel milk seller. Total volume in Chittor per day around 3 quintel. 2 Quintel go to dairy in Karuna, but unofficially. Meeting with 8 camel herders in Sava, selling milk to Karuna dairy for 18 Rs/liter.

12th June: Meeting with 50-60 camel breeders in Baruna, near Asan, selling camel milk to dairy for 12 Rs/kg.

2016

March, 14th, 2016: Meeting with 30 camel breeders at Pabuji ka devra in Pali district.

March 16^{th,} 2016: Meeting with ca. 50 camel breeders near Bassi (Jaipur district), organized by Shravan Raika.

This meeting organised by Shravan Raika was attended by about 50 camel breeders and camel milk sellers. The interesting fact emerged that there is a well-functioning "grey" camel milk marketing system around Jaipur in which about 30 camel milk sellers pick up and deliver camel milk to the government dairy, however not in the name of camel milk. As the milk price in the official dairy system depends on far content, the rates are low, only around 20 Rs/kg.

March 18th, 2016: **Meeting with camel breeders at Udinathji ki dhuni, near Daulatgarh, Asint (Bhilwara district).** This meeting was organised by Sheitanji Raika and brought together about 30 camel breeders.

April 3rd, 2016: Meeting with camel breeders in Barwi, Jhunjhunu district

The fact emerged that in this area there are a few camel villages, all delivering camel milk, but complaining about the low prices. On one hand camel breeders lauded the drought resistance of the camel saying it would not be impacted if there was a drought for eight years. On the other hand, because of the low income realised, they "threatened" to let their camels go wild "like nilgai".

April 4th, 2016: Field visits to camel breeders in Sikar district

More surprising information came to light here and how camels can be kept in intensively cultivated areas, producing high amounts of milk. In Burala and Khejroli villages, a Raika family was producing more than 100 kg camel milk/day, with camels in excellent condition.

April, 10th, 2016: Raika meeting at Swarupganj, Sirohi district

Camel breeders here complained about lack of income and emphasized their desire to sell camel milk, requesting opening of a dairy for that purpose. They decided to arrange a meeting with the "Cow Minister" who is from Raika community.

April, 12th, 2016: Camel breeders' meeting at Chamunda temple in Mundara, Pali district

About 20 camel breeders from Sirohi met with Shri OtaramDewasi, the "Cow Minister" who told them that Government is trying to include camel milk in Food Act and invited them to come to Jaipur and meet the Secretary of Animal Husbandry.

August 30th: Raika meeting in Isra, Sirohi organised by People for Animals

October, 25th: Camel breeders meeting

This meeting was held at LPPS headquarter at the request of camel breeders to inform them about the opportunities of camel milk marketing, as well as the need for hygienic handling and processing. It was attended by about 25 camel breeders from Pali, Sirohi and Bhilwara district

2017

February, 22nd: Meeting of Camel Milk Committee at LPPS campus in Sadri with officials from Department of Animal Husbandry, Veterinary College in Bikaner, Rajasthan Dairy Cooperative,

National Research Centre on Camels and about 25 Raika camel breeders to discuss how to take the camel dairy issue forward.

- 22. August 2017: Meeting in village Dandali near Sindhari in Barmer district
- 23. August 2017: Meeting near Nosar, Tehsil Baytu, Barmer district
- Dr. Jug Bhushan Wadhwa, Joint Director, Animal Husbandry, Veterinary Hospital Barmer
- 24. August 2017: Dr. Subhash Jangir, Veterinary Hospital, Jaisalmer
- 25. August, 2017: Meetings in Lodorva, Tehsil Jaisalmer and in Dholia, Tehsil Pokaran

Letters to government

Camel breeders have been expressing their opinion at various meetings and sent numerous letters to the Government of Rajasthan.

An excerpt is provided here

27th February, 2014

The Hon. Chief Minister Shrimati Vasundhra Raje Jaipur Rajasthan

Sub.: Congratulations!

Dear Madam,

We would like to congratulate you and initiating a comprehensive and ambitious programme to save the camel and officially declare it as a state animal and state heritage. To our knowledge, this is the first time in the world that any government has taken such a decisive step and we are very happy about this.

Based on our more than 20 years of experience, we do have a number of suggestions on how to make the act that is to be passed by the legislative assembly. For instance, we are a bit worried that a total ban on taking camels outside the state may have undesired consequences. We ourselves first drew attention to the sale of camels for slaughter in 2002. But we are also aware that farmers in Haryana and Punjab like to use camels as work animals, so this is a good market which creates income for the breeders in Rajasthan. Secondly, some of the migratory shepherds use camels as beasts of burden when they move into UP. So while all cruelty towards camels must be avoided, the genuine camel users should not be interfered with.

With respect to camel dairy farming, we suggest to initiate this in Chittorgarh, Udaipur and Bhilwara districts, as already around 5,000 k of milk are marketed from there, although not officially, i.e. not in the name of camel milk. The Raika from this area have a long tradition of selling camel milk so they are likely to benefit most quickly from organised marketing. As you may be aware of, in the 1990s a camel milk seller from Udaipur was sentenced to prison and a heavy fine by the High Court of Jodhpur, which regarded camel milk as "hazardous to human health". However, when our organisation took the case to the Supreme Court, it was decided that camel milk is beneficial as it is successfully marketed in other countries. It may be necessary though to change the food and dairy acts.

Madam, we would very much like to invite you to our campus in Sadri (Pali district) where we have built up a center for adding value to camel raw materials. We also would like to share some of our ideas for ecotourism products around the camel, especially here in the Kumbhalgarh Protected area. Kindly schedule a visit to our organisation according to your convenience but hopefully in the near future.

Once again, congratulations on your bold step which is making history and which we are sure will generate worldwide publicity for Rajasthan! Please be assured that we will do all we can to make the camel a success story for Rajasthan into the future!

With our highest appreciation and warm regards

......

Lokhit Pashu-Palak Sansthan P.O. Box 1 Sadri 306702 District Pali Rajasthan India 17th July, 2014

TO:

Chief Minister of Rajasthan The Hon. Shrimati Vasundhra Raje Jaipur

Subject: Camel as state animal and ban on trafficking camels

17th July, 2014

Respected Madam,

As traditional camel breeders, we welcome your dedication to save the camel and that you have declared it state animal. We are however deeply concerned about the planned legislation punishing camel slaughter and trafficking and we are convinced that this will not solve the problem and, rather than solve the problem, make it even worse.

For generations, we have had herds of female camels and have sold the male offspring at the Pushkar fair. This sale of young male camels was our only source of income from our herds. We sold young male camels to traders who raised them for use as work animals. For the last three years, there have been hardly any sales at Pushkar; we have had to take our camels back home and have gone without any income. Because of this lack of income, as well as because of other reasons, our sons and grandsons are not interested in breeding camels, nor can we encourage them to do so: camel breeding has become a dying profession.

Besides the lack of income, the two other big problems are disappearance of grazing areas and absence of veterinary care. It has become very difficult for us to find grazing for our camel herds, so often they are in a state of semi-starvation which also means that they easily become sick with tibursa and mange. We loose many animals due to disease, starvation and accidents.

All three factors combined make it virtually impossible to make a living from camel breeding: no market, no grazing, no health care. All these problems need to be solved, and a ban on trafficking will not help at all, but make it worse. It will lead to more neglect and suffering of camels.

Instead we suggest the following:

1. We need a market for camel products. Without the possibility of income, how can we continue to keep camels? Camel milk is a great product, which some of us are already selling, although in the gray market at low rates. Because of its health enhancing properties,

it should be sold at premium rates, but in order to build up a value chain large investment is required. We suggest that you support and provide incentives to private camel dairies or to publicprivate partnerships that process and market camel milk. We can learn from Arab and other countries in this respect. 2. Other products are camel wool and use of camels as draught animals, especially in tourist areas. Some places, such as inner cities of Jaipur and Jodhpur could be closed for autos and cars, with camel carts being only means of transportation. Such a move would really put Rajasthan on the map! For development of innovative products from camel wool, the state design and fashion institutes should be given incentives. 3. For grazing areas, some places should be earmarked for this purpose – these should be identified in a dialogue with the camel breeders. Furthermore, camels should be integrated into the planned Kumbhalgarh National Park. 4. In order to keep a check on the camel population and monitor it, the camel breeding herds should be registered. Already this has been done by LPPS in Jaisalmer and in Pali district. This would be the foundation for providing subsidies to keepers of camels – we have read that a subsidy of 50 Rs/day that is planned to be provided by National Disaster Relief Fund in drought situations. However, the problem of finding feeding for camels is permanent jnot limited to droughts. Madam, we request you to establish a multi-stakeholder platform for the exchange and generation of ideas on how to really save the camel and make it Rajasthan's USP, instead of prematurely passing

Signd by:

Hanwant Singh Rathore, Director, LPPS

Bhom Singh, President, Jaislamer Camel Breeders Association, Sanawra

Harji Ram Raika, President Godwar Camel Breeders' Association.

legislation which will not solve the core problem but increase camel suffering and hasten the decline

To:

The Hon. Chief Minister

of this wonderful animal.

Secretariat

Jaipur

Rajasthan

Sub: Eviction of State Animal from Forests and Threatening Starvation of Camels

Sadri, 13th August, 2015

Respected Madam,

Yours sincerely,

We request your urgent attention for the abject situation of the camel and its traditional breeders since it has become state animal. Lokhit Pashu-Palak Sansthan is an NGO that has worked for almost 20 years for the welfare of camels and camel keepers, and we have set up a camel conservation centre with our own camel herd — many of them animals rescued from slaughter. We are also doing our level best to create income for camel breeders, especially from the sale of camel milk for autistic children throughout India, and from the processing of camel hair and camel poo. However, we find it is becoming virtually impossible run this as a sustainable business because camel numbers have already decreased so much in the area.

Since many years we have had close ties with the camel breeders from all over Rajasthan and were especially close to the late Shri Bhopala Ram Dewasi. Madam, we currently receive many phone calls daily from camel breeders whose herds have been barred from entry to their customary grazing areas in forests. **Camel herds literally face starvation, as there is no place for them to go**. In addition, the camel breeders have no longer any income from these herds, with nobody buying camels, nor the milk being accepted by dairies, except unofficially.

Our organization is located in Sadri, right next to the Kumbhalgarh Sanctuary. Our herd of camels has been grazing in the forest since the last few years, without any problems. But on 2nd August the Forest department denied it entry to the forest. Only after we conducted a day long dharna in front of the Forest Department in Sadri, did we got the go-ahead from the SDM in Desuri for our camels to go into the forest. However some people from the surrounding 7 villages ae threatening social boycott if our camels are not removed within 15 days.

Our situation is not unique; as mentioned above we have been contacted by many camel breeders from throughout Rajasthan whose camels need to graze in forests during the monsoon season. While buffaloes and cows graze without any problems camels are being singled out by Forest officials who demand bribes of Rs 500 per camel. Madam, if the government declares the camel state animal, it has to take responsibility for providing grazing and feed to these animals. If this does not happen, then this amounts to a major act of cruelty to animals, as the camels are threatened with starving to death unless they have a place to graze. We can also not expect poor camel breeders to spend their time and life taking care of camels **without any income**. As mentioned above, the Rajasthan Cooperative dairy does not accept camel milk. There is no market for live camels. Their only choice in this situation is to either abandon their herds or to hand them over to government officials.

The situation is extremely urgent and needs immediate attention. Unless this is forthcoming, in the form of grazing permits in the forests and a market for camel milk, our State Animal will have turned into a zoo animal by the time the next livestock census takes place.

l am availa						

Hanwant Singh Rathore	
Director, LPPS	

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Photos of BCP process

BCP Inception Workshop in Jaisalmer



BCP validation meeting in Jaisalmer



BCP training in Workshop at LPPS campus







Meeting of Camel Milk Commission at LPPS campus in Sadri

