

The Camel, The Keeper, The Salt-Bush

THE CAMEL, THE KEEPER, THE SALT-BUSH

DISCOVER INDIA PROGRAM

2017-18

“My comely camel, won't you eat
the sandal wood and drink your fill
Of cleanest purest water, food
the finest you refuse it still
What law gave you the tasty thrill
of salt-bush mere, above all else?”

-Shah Latif Bhitai

CERTIFICATE

This is to certify that the work incorporated in this report entitled “*The Camel, The Keeper, The Salt-Bush*” submitted by the undersigned Research Team was carried out under my mentorship. Such material as has been obtained from other sources has been duly acknowledged.

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Acknowledgements

We are deeply thankful to all those who supported us through this project. Without their help and guidance, we would have remained in the early ideation stages and this project would not have materialized into concrete research or into this report.

Firstly, we would like to thank FLAME University and our esteemed vice-chancellor, Dr. Devi Singh for giving us this massive opportunity to learn and add to our being. FLAME's Discover India Program has given us experiences we will cherish for a lifetime. We thank the Chairs of the DIP Committee, Doctor Poonam Gandhi and Professor Ravikant Kisana for their constant guidance, readily available support and backing.

Our deepest gratitude to our faculty mentor Professor Barun Thakur for always pointing us in the right directions, and being of monumental help during the on-field leg of this project. Our heartfelt thanks to our report mentor JK Navneeth for guiding us through the process of writing this report.

Most importantly, we would like to express our deepest gratitude to all the experts who accompanied and guided us on field – Mr. Mahendra Bhanani and Mr. Pankaj Joshi from Sahjeevan, Mr. Seth Singh, Mr. Sher Mohammad, his beloved wife Naani and their granddaughter little Lakhmi. We would also like to thank all the Fakirani Jats and Rabaris who welcomed us into their homes and took out time to speak to us. Last but not the least, we would also like to thank the officials from the forest department of Kutch, the Border Security Force and the government of Kutch for allowing us to conduct research in that beautiful district.

Abstract

Kutch, Gujarat, is home to the unique Kharai Uunth – a camel species that can swim. The revered saint Savla Pir entrusted these camels to the Rabaris, and they in turn entrusted them to the Fakirani Jats, migrants from Sindh, Pakistan. These communities made breeding the Kharai camel their sole occupation and chief source of sustenance. For generations together, they have reared the Kharai camel, prevented its extinction and made place for it in their histories, traditions and cultures.

An entire economy surrounds the Kharai camel. Its breeders, the Rabari and Fakirani Jat communities earn their livelihoods from the owning and renting of Kharai camels and the sale of camel milk. In most families, the female Kharai camel is worshipped as a Goddess. Festivals are celebrated annually that revolve around decorating and exchanging Kharai camels. Clearly, the Kharai camel breeding is of great significance to the two communities. The government is hugely involved in regulating and supporting and in some cases, hindering the profession. The Kharai camel and the ecology of the region are interdependent on each other in more ways than one. The government's interference through the Forest Department is proof of its tireless efforts to conserve the ecological balance. This report will elaborate upon all these points.

Researching the Kharai camel breeding profession was not limited to collecting factual information. A lot of our research was based on personal experiences and observations. The conclusion of our report is a narration of the things we witnessed happening before our eyes such as the brotherhood between the two communities or the contrasting interests of the government and the camel breeders when it comes to conservation of the environment.

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The First Leg – Introduction and Overview



Image 1: Little Lakhmi, who accompanied us on foot for 12 kilometres

Source: Discover India Program

1.1. Introduction

Camels, in the Indian context at least, are usually associated with the state of Rajasthan, and the most common image one would conjure is that of a line of tiny camel silhouettes walking atop a distant, golden sand dune, under the scorching sun.

Here is an alternative image, one that this project is more concerned with, and that is an image of a giant herd of camels walking on a seashore, wading into the water, somewhere in coastal Gujarat, and swimming their way to their food source. This is a description of the Kharai Camels, a unique species, the only species of camel that has the ability to swim, and are the only species of camels which feed on mangroves.

Traditionally found in Mundra, Lakhpat, Abdasa and Bhachau talukas of Kutch, Gujarat, they feed on saline trees, shrubs, grass species like kharijar (*Salvadora persica* Linn.) and lano (*Suaeda spp.*) In fact, their very name is derived from the Kutchi word “khara” which means saline or salty, as they have a high endurance for salty water (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013; “Rare Kharai camel species”, 2014).

The Rabaris and Fakirani Jat communities are the breeders and caretakers of the Kharai camels. The profession of Kharai camel breeding has been passed down from generation to generation and is part of the history and traditions of the two communities. Traditionally, the Rabaris have been, and are the ones who own the Kharai camels and the Fakirani Jats are who graze and look after them. As per lore, Kharai camel breeding as an occupation has always transcended these professional boundaries and has been of great socio-cultural and religious importance. This profession is an emblem of the Rabari and Fakirani Jat identity. This means that the two communities are known by their profession. They are divided in their roles as camel breeders and rearers but united in their contribution to the Kharai camel breeding profession (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013).

With the rising ecological imbalance in the region, the Kharai Camel breeders are having to compromise on their lifestyles. Their camels are facing food shortages because of mangrove depletion. The breeders follow the traditional grazing pattern along the coastal districts. In the absence of special sheds, the camels swim about 3 kilometers at a stretch in search of mangroves then return within 2-3 days to consume fresh water from cattle troughs,

wells, ponds, etc. These are great distances to travel for food and water. During the monsoons, however, these camels stay on the mangrove islands or bets for 2-3 months at a stretch due to the availability of fresh water puddles.

Camel by-products such as wool and milk are not in popular demand, and there aren't many economic benefits that this profession brings with it. The growth of factories and manufacturing plants has created a vast pool of alternate employment opportunities. Shifting to stable jobs in the labour industries has proved to be more profitable for the Rabaris than the fluctuating occupation of Kharai camel breeding. Modernization has reduced the appeal that a nomadic lifestyle held for the Fakirani Jats. They now prefer residing in fixed locations, and since the nature of the breeding profession is itself nomadic, the Fakirani Jats are slowly abandoning it. All these changes and their effects will be elaborated upon in the following sections.



Image 2: Fakirani Jat women and children in their “pakkha”

Source: Discover India Program

1.2. Historical Overview

The following overview will explain the individual histories of the Rabaris and Fakirani Jats by tracing their origins and exploring existing folklore about the two communities. Understanding the origins of the communities will help in understanding the origins of the camel breeding profession as well.

1.2.1 The Rabaris. There are multiple narratives about how the Rabaris migrated to Kutch. It is tough to discern fact from lore even though the Rabaris have a famed system of record keeping. These are the two popular narratives:

1. The Rabaris migrated from Tharapak in Sindh, Pakistan, into Kutch as long ago as 708 AD during an Arab invasion. The cause of this exodus was to escape being forced to convert to Islam.
2. The Rabaris had a rift with the King of Jaisalmer (where they are also said to be from), when he asked to marry a Rabari girl and elders disagreed. Due to this, the Rabaris embarked on a self-imposed exile that culminated in them settling in Kutch (Dyer, 2014; Paniyil, 2016).

The Rabaris have an intriguing legend regarding their origins that closely associates them to Shiva:

As Lord Shiva sat meditating on a mountain, Parvati, to pass the time, fashioned multiple statues out of the dust and sweat on her husband's body. Shiva breathed life into one of the many statues, and it ran miles and miles without tiring and with the speed of light. Soon, Parvati got tired of looking after it. To ease the burden, Lord Shiva gave the camel a fifth leg with the intent of slowing it down, but this only made the camel immobile. And so, he pushed the fifth leg upward and it is said to have become the hump. To relieve Parvati of the bane that was his creation, he blew life into another statue – the first Rabari and camel herder, Sambad. Sambad roamed the forests in isolation and fed on sweet camel milk. After a few months, Sambad noticed that his milk was disappearing little by little, day by day and he wrongly accused Shiva of stealing his only source of survival. In order to prove his innocence, Shiva hid in a tree to discover the identity of the pilferers. He saw that they were four enchanting women from the court of Indra, and one of them was named Rai. Shiva asked Sambad to steal their clothes in revenge but warned him that

if they touched him, Sambad would turn to dust. Thus, every time they came close, Sambad would throw out one piece of clothing, and while they fought over whose garment it was, he would escape. This was Shiva's trick to entice all four women. But only one of them, Rai, reached Shiva's abode along with Sambad. Justice was meted out when Rai admitted to having stolen the milk and asked Sambad to dole out her penalty. Sambad cleverly asked for her hand in marriage. Rai would marry him on one condition – that she would never have to talk to him. Thus, the original Rabari is described by members of the community as a lone man silently roaming the jungles (Dyer, 2014).

1.2.2 The Fakirani Jats. The devout followers of the great Sufi Mystic Shah Bhitai of Sindh travelled far from their homeland, a primal instinct guiding them, an instinct at the core of their nomadic tradition. (PSBT, Monterio & Jayasankar, n.d.).

The Jats supposedly resided in the Halab region of Iran before escaping to Sindh, Pakistan. The atrocities of the feudal landlords there became unbearable and so they came to Kutch, Gujarat about 400 years ago in search of new pastures and livelihoods. With time, the Fakirani Jats became a community separate from the large group of refugees that escaped from Iran. They became *fakirs* and proclaimed themselves as holy men and women invested in the study and preservation of the values preached by the Quran. Today, they are mainly engaged in camel breeding and other kinds of animal husbandry. The Jats are Sunni Muslims and practise Islam (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013).

The question that arises now is that of how these two communities are connected. Legend has it that two Rabari brothers who were having a disagreement regarding ownership of their camel went to a Muslim saint who is now revered by the Jats, and asked him to settle the dispute. The saint made a camel out of beeswax and asked the two brothers to choose between a live camel and the wax camel. The elder brother immediately chose the live camel and left, while the saint told the younger brother (Devidas Rabari) to return home and let the camel follow him. He was instructed not to look back, and was told that the camel would turn into a herd if he followed instructions, and so it did. The saint also said that if the number of camels becomes unmanageable, Devidas can entrust them to the Jats, who will take care of

them. This tradition still continues and the camels are a common link between the two communities and reason for their harmonious coexistence (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013).

1.3 Socio-Cultural Overview

This section is a compilation of interrelated facts not about the Kharai camel breeding communities as a collective whole. The functioning of these communities is based on the functioning of the Kharai camel breeding profession. The following paragraphs try to explain the connections between the camel breeding societies and the camel breeding profession. This section also briefly mentions how the kharai camel breeding profession forms a part of the culture of these two communities.

It must be noted that the Rabaris were also nomads. Until recently, the idea of permanent settlement was alien to them. The Rabaris were more or less a tribal group shifting residence on a daily basis, freely using scarce natural resources of the places they visited and having their own legal systems within the tribe. Their constant moving around was not favourable to their development. In the eyes of the government, their nomadism was seen as an offence rather than simply a search for water and pasture. They were unable to obtain the benefit of the facilities offered by a single legal institution. No municipality or *Paanchayat* (a local self-governing body) of one specific region could help them since they did not belong to any one specific region. They lived in liminal spaces, neither here nor there, and never fell under the jurisdiction of any single governmental authority. Thus, they began to settle in scattered areas of Kutch. According to research, they were settling not to avail governmental subsidies but to acquire education, the lack of which made them gullible and easy to cheat. If looked at in connection with the 'God-given' profession, settling down is unfavourable to the practise of herding the Kharai camel. The several problems of pastoralism in modern society are snatching away the socio-cultural identity of the Rabaris that is deeply embedded in their occupation. (Dyer, 2014). Looking at the Fakirani Jats and their occupation from a sociological point of view, it is clear that for this community, too, the Kharai Camel is not only a source of sustenance but also a carrier of their history and a living preservation of their mythology. Irrespective of the authenticity of the legends, Kharai Camel rearing *is* a

profession that has stuck with the identity of the community for ages, being passed down over generations.

Another interesting facet is that both communities follow religions; the names of which are not usually taken together in India without inherent and accompanied hesitation and scepticism. The cooperation among the two groups sets an example for the rest of the nation.



Image 3: Paancha Bhai Devidas Rabari and his brother Sonal Bhai Deva

Source: Discover India Program

1.4 Geographical Information

Kutch is the largest district in the country occupying 45,652 sq.km which is about 23% of the total state of Gujarat (Vidyarthi, 2013). The district is flanked by the Arabian sea and the Gulf of Kutch to its west and south and has the Great and Little Rann to its northern and eastern portions. Because it is surrounded by the above mentioned geographical features, it appears to be a sort of island and thus, has also been called *Kutchdweep* or *Kutchbet*. Etymologically, “Kutch” has been derived from “Katchua” or “Kachbo” since it is shaped like a tortoise’s back (Japan Society of Civil Engineers, 2001).

As for the topographic division, the district consists of

1. The coastal zone
2. Kutch mainland
3. Little and Great Rann
4. Banni plains

The coastline extends upto 350 km and the coastal plain that is generally flat with a few creeks is spread for 35-45 kms. The mainland is further divided into the hill range of isolated peaks to the north, rocky upland with broken grounds and the coastal plains. The Rann comprises marshy land, that has crystallized salt and covers about 25000 sq. km. The low-lying area of Banni plain spread across 2000 sq.km in the south-west is similar to Rann and has superior grassland in approximately 777 sq.km. Hence, the overall landscape comprises of uplifts and residual depressions. The mainland consists of alluvial river terraces whereas the Great and Little Rann and the Banni Plains contain salt pan and mud-flat depressions (Vidyarthi, 2013; Japan Society of Civil Engineers, 2001).

There are four types of soil:

1. Shallow Black soil
2. Residual Sandy soil
3. Coastal Alluvial soil
4. Desert soil

The Shallow Black soil is found in the northern and central areas of the mainland and is not very fertile. The Residual Sandy soil is useful for the plantation of crops that have short growth duration and don't need water supply in abundance and is identified as reddish brown in colour. The soil found in hilly region is prone to erosion, contains fragments of rocks and has low fertility. The coastal Alluvial soil, despite having a range of alkalinity and salinity depending on the region, has a medium level of fertility. In Rann, the alluvial and the silty clay is covered with a high concentration of salts, primarily sodium chloride (Vidyarthi, 2013).

Pastoralism in Gujarat is largely concentrated in Saurashtra and Kutch. As a vocation, it relies heavily on the climatic conditions and the local ecology (Choksi & Dyer, 1996). Kutch being largely barren and uncultivable, the arid and semi-desert areas are not conducive to agriculture. Temperatures peak at 49 degrees, and droughts occur frequently. The low

rainfall (ranging from 300 to 400 mm per year) and soil type contribute to the growth of thorn bushes mixed with acacia capparais, euphorbia, zizyphus and grasses. However, the coastal region provides a respite from the usual dryness of Kutch, and is comparatively greener. The relative increase in grasslands thus intensifies the dependence on animal husbandry there. Only 15 % of land, mostly along the 50 mile wide coastal belt is under cultivation. Mangrove formations are spread across 980 sq.km, particularly in the gulf of Kutch, which have accounted for 17% of the total mangrove cover in the country, and the largest after the Sundarbans. The livelihoods of the fisherfolk, cattle and the camel herders largely depend on these mangroves, whether it comes to fishing, grazing or collecting fuel for cooking. Their roots filter the salt which enables the growth of other plants on softer sediments and retain the mud from being washed away with the tide. Their trunks act as a barrier for the coastal settlements from storms or high tides (Martin, 2016).

Kutch has a population of 1.72 million animals as opposed to the human population of 1.05 million. This explains the local population's dependence on various forms of animal husbandry and that of the Rabaris and Fakirani Jats on the profession of Kharai camel breeding. (Choksi & Dyer,1996).

1.5 Rationale

Commonly, Kutch is well known for the existence of the White Rann, the teeming white desert, the bed for salt-water harvesting. Some may go a step further and associate Kutch with the Ajrakh block printing or boat making of Mandvi. However, seldom does one think of the Kharai Camels. A biological marvel, the Kharai camels are the only breed of camels bestowed with the genetic makeup allowing them to traverse both land and sea. Usually passed off with a mere mention in many scholarly articles, this mammal, a fine example of Darwin's theory of evolution and adaptation, has not enjoyed its due share of the limelight and wide-eyed fascination that comes with it.

A proposal for our topic of study made by a fellow researcher piqued our interest. Our ignorance was exposed when we incredulously asked, "Camels that swim? In Kutch?"

Much deliberation led us to finally select the Kharai Camels as a topic of study. We tasked ourselves with answering a question fundamental to our research: Why the endangered Kharai camel of Kutch? (Srivastava, 2013).

Firstly, the topic satisfied the need to find something challenging, but beyond that it was the need to explore and start a conversation on a topic where very little had existed before. It dawned on us that the Kharai camel breeding process was rooted in years of rich tradition, culture and history . It was derived from intuition and codified in orality. Therefore, it gave us an avenue to study a subject that had moulded history, guided culture and created traditions, unknowingly so. It continues to do this things even today (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013).

Also, we were fascinated by the Kharai camels' breeders, the Fakirani Jats, mystics of a great sufi lineage, wandering the arid lands with their herds, singing and reciting words of their patron saint. Their methods and lifestyle had an inherent spirituality that attracted us to them.

Secondly, this gave us an opportunity to observe how an animal interacts with the land, and how the ecology affects the economy and vice versa. The camel breeders and various organisations working with them understand the camels and mangroves to share a beneficial symbiotic relationship even though some agents of the government strongly say otherwise. This dispute is a cause of great strife for the breeders. They find themselves legally bound, helplessly watching their herds die (Srishti School of Art, Design and Technology, 2014).

We endeavour to understand who has truth on their side, without the illusion that it will lie solely with either.

Finally, we felt that by selecting the camels as our topic of research, we stayed true to the spirit of the Discover India Program. It is a topic that is novel and one that provides immense scope for research. We are one of the few, if not the only group to research *life* (emphasis added) in the context of the Discover India Program. This is our attempt to understand not a craft, not a place, not a monument, but the livelihood of a community and the intricacies involved in the breeding of a biological gem. This is our attempt to understand their very existence.

1.6. Research Statement

“To study the distinct Kharai Camels and their breeders, to understand the interaction between them and their environment, and to analyze the current state of the camel breeding and rearing profession.”

1.7. Objectives

As mentioned earlier, the Kharai camel is not only a giver of livelihood but is also a way for the breeders to sustain and preserve their histories and traditions. Most of the secondary material surveyed for this project examines individual events in the historical, economic and cultural trajectory of the Kharai camel breeding profession. The financial difficulties, among others involved in breeding the Kharai camel are presumably growing greater by the day. We intend to understand the impact of the breeders' migration to other prospering endeavours on their ancestral profession. The breeder and the camel share a symbiotic relationship. The former has been rearing and breeding the latter for generations, and their attachment transcends the boundaries of just an occupational association. To put an ecological lens on viewing this relationship may help understand the interdependence among man, animal and physical environment too. The socio-cultural identities of the breeders may be deeply embedded in their professional identities, and neglecting this may dehumanise our research into being just about the profession and not about the people who practise it. The coexistence of the Fakirani Jats and the Rabaris sets an example for the world. We aim to explore this co-existence of the two breeder communities and understand their professional alliance, while emphasising the role that the Kharai camel plays in binding the two together. Our objective is also to grasp the dynamics of the relationships between the breeders and the other communities who rely on the same natural resources for their sustenance in the same geographical space.

- 1.7.1. **To chart the Kharai camel breeding process from its origin to its current situation**
- 1.7.2. **To assess the economic intricacies of Kharai camel breeding and understand the hardships involved in its sustenance**
- 1.7.3. **To draw parallels between the professional, socio-cultural and religious identities of the Kharai camel breeders**
- 1.7.4. **To understand the interdependence between the breeders, the Kharai camels and the ecology of the region**
- 1.7.5. **To explore the associations between the Rabari, Fakirani Jats and the Government**

1.8 Research Methodology

1.8.1 Methods. To enable a thorough assimilation knowledge pertaining to the subject matter at hand which included but was not limited to already existing studies in this domain, we relied on two methods of research-Primary and Secondary.

1.8.2.1 Preliminary (Secondary) Research. Our secondary research was undertaken before our on-field research. This consisted of sources that varied in content and form. They ranged from statistical reports outlining the number of breeders, number of camels and the hardships they face, to detailed descriptive papers on the breeder communities. We gathered information on the breed, the economics of camel breeding and the historical importance of the profession. These sources consisted of journals, published articles, newspaper reports, documentaries, books and dissertations.

As part of our secondary research, we also established contact with NGOs in Kutch, working closely with the breeder communities to acquire recognition for the Kharai camel. This was done in an attempt to understand the nature of the nomadism the breeders indulge in, and to get a preliminary idea of what we may encounter on-field, as such a research was novel to all the researchers. Hence, with our secondary research, we attempted to explore the socio cultural, economic, and

ecological components of the entire process of camel breeding, and its significance in the aforementioned domains.

1.8.1.2 *On Field (Primary) Research.* The more significant and elaborate part of this ethnographic study was the On-Field Research. All our primary data was obtained from this endeavour. The primary sources of research included, but weren't limited to the breeders, their families, interviews with representatives of the forest department, the Managing Director and Field expert of an NGO working closely with the Kharai Camel breeders and with a specialist in the field of breed recognition and genetics. Therefore, with our primary research we attempted to interact with all stakeholders and gather multi-dimensional information to understand all aspects of our topic of study.

Since the nature of our topic was such that while the numbers of camels, breeders, and the economics of the affair were of prime importance, the profession was (is) also rooted in years of tradition and cultures. It was evident that both these sides to the study are tightly interlinked and hence, it was essential to conduct both Quantitative and Qualitative research to do justice to this topic.

Qualitative research comprised of those aspects which cannot be measured, but can be described, in the form of a narrative. Features of the camels and of the breeders' lives - cultural and social narratives would be documented and categorized as Qualitative Research. As for Quantitative Research, the aim was to gather considerable amounts of measurable data - this could either be the number of camels bred by a household, and by extension, the particular populations of camels, or other aspects such as the involvement of family members in the breeding and rearing process, the household assets of the respondents and so on. The economics attached to the breeding of camels, the buying and selling of camels, or camel milk, also constituted Quantitative research.

1.8.2 Materials.

1.8.2.1 Survey Questionnaires by Random Sampling. Our primary material for on-field research was a structured questionnaire designed pre-field, on the basis of secondary research and the gaps that were found. The questionnaire had a mix of open and close ended questions. We aimed to distribute survey questionnaires amongst 30-50 households. This number was arrived upon after analysing the latest available Census Reports (2011), and assessing the socio-demographic data of the region.

The households were selected by Random Sampling with a view to arrive at unbiased conclusions. The talukas and subsequently the villages were selected by determining which have the most number of Kharai camels and the places where most of their breeders are found.

1.8.2.2 Interviews. In addition to using survey questionnaires, the research was also aided by the usage of interviews, to attain a more comprehensive understanding of the topics.

1.8.2.2.1 Semi-Structured Interviews. Semi-structured interviews were used while interviewing scholars, religious heads or other such stakeholders. This form was chosen so that a basic skeleton of the interview can be adhered to, but flexibility of going beyond what the question asks is maintained.

1.8.2.2.2 Unstructured Interviews. Unstructured interviews with open ended questions were used for the most part of our interactions on field. The breeders and their families were interviewed in this manner, while keeping in mind the important questions that need to be asked. This enabled a free flowing, conversation-like interview, which in turn enabled the interviewee to communicate with the interviewer without being restrained by the limitations close-ended questions.

1.8.2.3 Observation. Complete information on various gaps in the research was not be fully acquired through survey questionnaires and

interviews. We recognized that an ethnographic study such as this, with various socio-cultural elements heavily relied on observation as a means to fill these gaps and evidence the research being conducted using other methods.

1.8.2.3.1 Non-Participant Observation. This is the means of observation that was employed, wherein the researchers will not be a part of the activities but were actively observing these activities and the people engaging in them.

1.8.2.4 Supporting Software. Since there was manual filling of the questionnaire data, the collation and analysis of the same was done using the support of a few software programs.

1.8.2.4.1 Microsoft Office Suite. Microsoft Office Suite, more specifically Microsoft Excel and Microsoft Word were used to collate on field notes, survey data and transcripts.

1.8.2.4.2 STATA 12. This software was used for statistical analysis of collated and tabulated data.

The interviews taken amounted to more than 9 hours of video footage and the totality of visually documented data was over 150GB. All these methods of research were employed in the hopes to conduct proper research, reach thorough conclusions, and present some justified, authentic work surrounding Kharai Camels.

9. Limitations of research methodology

There were a few limitations, rather hurdles that we encountered and overcame while using the aforementioned methods for this research. The first major hurdle was that owing to their nomadism, and the fact that there were such stringent rules regarding entry and exit in notified areas, we were not able to find breeders in any fixed village/locality and had to travel spontaneously in order to follow them on their grazing routes, or catch them on their way there. Due to this, we altered our method of research a little and in addition to Random Sampling, we also engaged in purposive sampling wherein we selected respondents based on

our prior knowledge about the field and their availability. Here, it is appropriate to mention that our data is based on the survey responses of a total of 27 respondents, and our interactions with them.

The second hurdle we encountered was that transferring of survey responses from the sheets to Microsoft Excel/Word was time consuming, and the process revealed that there were a few responses that were unusable due to lack of information or incoherent information. The number of 27 was arrived upon post filtering out 3-4 responses.

The Underbelly – Literature Review



Image 4: Noor Khan, a local singer who sang Shah Bhitai's verses for us

Source: Discover India Program

The previous chapter gave a brief outline about the historical and socio-cultural features of the Rabaris and Fakirani Jats. The following chapter is a more detailed review of literature already present on the subject matter at hand. The information has been categorised into broad sections to facilitate ease of understanding. Some of the facts may be a repetition from the earlier chapter but they have been repeated only to provide context and ensure continuity.

2.1 Findings from Literature Review

Reviewing the existing literature on the topic provided us with some information, but we recognized the fact that there is a lack of adequate research on the topic. Most sources give only a general overview without delving into substance. Factual information is limited to numbers. Those scholars and researchers who have worked closely with organizations to study the Kharai Camels have covered either their biology, the lifestyle of the breeders, or the communities, but not all of these aspects in unison. Thus, the very first inconsistency we discovered during our literature review was that Kharai Camel breeding has not been spoken or written about as a profession. It has been written about either in parts, bits, and fragments, or in a very general, broad overview.

Table 1 is a tabular synopsis of the Kutchi and Kharai camel population in Kutch. It has been summarised for convenience.

Table 1

Kharai camel population in Kutch

Research location	Total camel population	Kutchi Camel population	Kharai Camel population
Kutch, Gujarat (largest district in India with an area of 45,674 km)	12,000	10,335	2173 (found in Mundra, Abdasa, Lakhpat, and Bhachau talukas)

Note. As per 2011 data

The location we chose to conduct our research on the profession of Kharai camel breeding is Kutch, Gujarat, which is the largest district in India spanning an area of 45,674

km. Owing to the tremendous expanse of grazing space and proximity to the coast, Kutch is home to a population of around 12,000 camels. This number is inclusive of the two distinct breeds of camels – the Kutchi (10,335 numbers) and the Kharai (2173 numbers) (Sahjeevan, 2011). The difference between these breeds is slight, but visibly/intuitively evident. However, there isn't a lot of specific research surrounding these differences, save the fact that they vary genetically, by at least 10-15% (Shrivastava, 2013).

The Kharai camel's natural habitat is in the talukas of Mundra, Abdasa, Lakhpat, and Bhachau. Much has been mentioned about the breeders of the Kharai camels earlier in this report. The chief caretakers and breeders of the Kharai camel belong to the Rabari and Fakirani Jat communities (Sahjeevan, 2011). A detailed description of their historical origins has already been provided in Chapter 1. It is now important to give an account of the varied features that have shaped the Kharai camel breeding profession and the ways in which those features have influenced both parties involved: the breeders and the Kharai camel.

2.1.1 The Camel Situation in India. India is home to the third largest camel population, particularly one - the humped/dromedary camel. Camels are mostly used as draught animals to pull two wheeled carts, for ploughing, lifting water, threshing and riding. They were primarily important to the Rajputs for serving in their military corps and also for camel racing. The BSFs of Rajasthan and Gujarat are known to patrol the borders using camels. Also, they are an obvious tourist attraction. Although Rajasthan amounts to 71% of the total camel population, Haryana has 16%, Gujarat 4.5%, Punjab 4%, Uttar Pradesh 3.5% and Madhya Pradesh 2%. Camels in Maharashtra have been preferred over draught bullocks for their economic viability and grazing habits (Ghotge, 2004) (Rollefson, 1992).

The regionalisation of camels through conscious human intervention on the basis of their distinct physical and performance traits (Rollefson, 1992) is the reason there are only 9 camel breeds that have officially been registered by the National Bureau of Animal Genetic Resources. Kharai Camels have recently been recognised as the ninth separate camel breed differentiating them from the Kutchi camels (shastri, 2015). The following are few specifics about the Kharai Camel.

2.1.1.1 *Physical characteristics:* As the Kharai camel is an ecotonal breed, it can survive on dry-land as well as in a coastal ecosystem. Apart from physical differences such as the neck thickness, foot pad, body size and colour, as compared to Kutchi camels, the Kharai camels are less prone to common skin disease such as *khaji* or dermatitis and can tolerate water with TDS (total dissolved solid) upto 10,000 ppm (“Rare Kharai camel species”, 2014).

2.1.1.2 *Kharai camel products.* Even though the market for camel milk or wool is not established in Kutch, Kharai camels’ long and smooth hair can be used for weaving. The breeders use camel wool to prepare *cheko/veno* that regulates milk suckling by the calves (“Rare Kharai camel species”, 2014) and weave bags that are sold to foreigners (K. Aditi, 2010). Camel milk, a healthier alternative for being low-fat (may be a potential cure for ailments like diabetes) is now consistently promoted by entities like the Animal Husbandry Department and Amul (Paniyil, 2016).

2.1.2 **On Industrialisation in Kutch.** Kutch witnessed a huge wave of industrialisation in the recent past. The increased presence of factories and manufacturing units has resulted in a sudden escalation in pollution levels. Depletion of water resources, reduced cover of mangroves, and rise in salt content of ocean water are the other distressing by-products of increased pollution. Pollutants dispersed from factories adversely affect the life of mangroves. There is also an acute scarcity of food resources for the Kharai Camel since its staple diet is mangroves. Additionally, a large part of the land the breeders previously used for grazing is now under the jurisdiction of the Forest Department. Land is also being given to individuals and land holding firms for harvesting of *prosopis juliflora* to make charcoal. Access into these areas is now heavily controlled, and breeders have to travel great distances in search of fodder for their camel herds (S. Anushree & Thorat, 2015; Sahjeevan, 2011). Furthermore, global warming, as a phenomenon, is also bringing about certain extreme changes to Kutch’s climate, changes which the

camels are unable to adapt to, and as a result of this, the camels are now more susceptible to a host of diseases (shastri, 2015).

Some of the coastal areas along the Mundra port have been declared as 'Special Economic Zones' by the Government of Gujrat since 2005. This is a result of the Government's decision to capitalize on the various power plants and refineries that cropped up in the area following the inauguration of the privately owned Mundra port. It was easy to acquire land in these sparsely vegetated areas for such projects. SEZ's are places meant to encourage and practice large scale manufacturing, augment exports and thus develop employment opportunities. These places are deemed to be foreign territories for carrying out trade and operations and for the duty and tariffs. The goods and services which enter the SEZ's from the Domestic Tariff areas are considered to be imports and the goods going out from SEZ's are considered as exports (Industries Commissionerate Gujarat Government of India, 2017).

Gujarat is one of the most industrialized states in the country and this rapid industrialization process is being promoted as a huge success story. However, the mushrooming of several industries along the ecologically sensitive areas of the Mundra port have had an adverse impact on the environment as well as the daily lives of resident pastoralists. The setting up of power generation companies without environmental clearance had once forced the pastoralists, fishermen, saltpan workers etc. to come together and file a PIL as it would lead to continuous displacement, environmental damage, and disruption of habitats. The Adani Group acquired thousands of hectares around their port under the Special Economic Zone scheme for establishing 'Mundra Port and Special Economic Zone Pvt. Ltd.' As of 2010, the land earlier used for grazing, wastelands and fallow lands from 14 different villages was taken up by industries (Ramani, 2010).

The Mundra region has vast stretches of mangrove vegetation and is a coastal regulation zone. Hence it is an ecologically sensitive area. However, the Adani group and various other industries have acquired land and developed projects only on the basis of in-principle approvals from different

regulatory bodies considering them as final. They cleared large chunks of forest land and mangrove vegetation without approvals. This was also a result of the inefficient process of obtaining environmental clearances as the assessment was not carried out by independent bodies or regulatory authorities linked to the government. The situation became worse when the government of Gujrat started the single window clearance system of facilitating the land acquisition process for industries and later declaring them as SEZ's. The Government did not conduct any surveys or try to find out how the lives of the local communities dependent on traditional livelihood such as pastoralism would be affected by this boom in industrialization (Ramani, 2010).

The Hyderabad based Sanghi Cement group has set up an industry producing 2.5 million tonnes per year in the Abdasa taluka. The company also had plans to start limestone mining along the west coast of Kutch District. The National Environmental Research Institute, Nagpur (NEERI) assessed the environmental viability and sustainability of the operations and future plans of the company and was unsatisfied with respect to its ecological harmony. It submitted a report to the Supreme Court of India holding different central and state government agencies responsible for issuing clearances to the company without conducting a regional study on 'Environmental Impact and Risk Assessment' (Kohli, 2002).

A huge part of the company's area falls within the boundaries of the Reserved Forest of Golai and Western Mangroves. The company has carried out many construction activities in this 'ecologically vulnerable region' in the Abdasa and Lakhpat talukas of Kutch. These activities were carried out without producing any authentic document to the Forest Department for the process of obtaining an ecological permit or clearance. This has caused large scale damage which is irreversible within the boundary limits of the Reserved Forest Area. The facts stated in the NEERI report are quite accurate, reasonable and convincing pointing to the fact that the whole project of Sanghi Cement would affect mangrove growth in the region (Kohli, 2002).

Six cement companies which includes Sanghi Cement have huge plans to build private jetties along the coastline between the Lakhpat and the Abdasa Talukas. The project of Sanghi Cement situated at the Khauthar island is under progress. This area of the jetty has several rare species of plants and animals and is a rich ecosystem. The back end operation offices of the jetty are located four kilometers into the Coastal Regulation Zone. The West Mangrove Reserve Forest Area would be threatened due to dredging and desalination operations once the jetty is operational. During high tides, the water moves through the Kharo creek and around Khauthar island. One of the largest patches of mangroves along the coastline stretching for 6km is only 200m away from Khauthar. Thus, the operations of Sanghi group would have had an adverse effect on the mangroves situated east of Khauthar island (Kohli, 2002).

The power plant and desalination plant wastes including salty water having a salt content of about 68000 ppm would be released everyday into the Kharo creek increasing its salinity by 500-7000 ppm per day proving disastrous for the mangroves which are only 200m away from the waste discharge pipes. However, it is interesting to know that the Gujarat High Court has has stated that none of the operations and projects mentioned above contribute to the threat of imbalance of the ecological system around them or to Kutch in any way possible (Kohli, 2002).

2.1.3 On Education and the communities' subsequent shift from nomadism to pastoralism. The Rabaris and Fakirani Jats are nomadic communities. Education is not their top priority. Schemes involving education, or any service, does not easily entice them. They have always remained averse to any modern development. They do not see education as a means of departure from their nomadic lifestyle to any other forms of lucrative employment, but they do treat it as a valuable good for the younger generations, as they can use it as a job ticket, should the traditional occupation fail.

Children are sent to schools, and they return home to the care of reliant grandparents who no longer go out on nomadic excursions. They think

of literacy, or education, as a viable option or investment, mostly because for one reason: they can read the destination on plying buses, and they will not be monetarily exploited by government officials, policemen, or businessmen. Their aversion to education as a pathway to modernity results from their dedication to their nomadic lifestyles; they prefer to stick to pastoralism as their sole profession. However, these communities are slowly giving up their nomadic lifestyles since their constant moving around is not favourable to their development. In the eyes of the government, their nomadism is seen as an offence rather than simply a search for water and pasture, and as a result they are unable to obtain the benefit from the facilities offered by a single legal institution (Dyer. C, 2001; Dyer. C, 2014).

In light of this situation, this community, that started out as camel breeders, is now migrating to other professions such as wage labour and breeding cattle. The instability of income due to the absence of a market for camel products is pushing them towards alternative occupations that do not necessarily match with their nomadism. The dwindling Kharai Camel population also contributes to this professional migration, but at the same time, the Kharai Camel population is dwindling because there are very few people breeding camels (Das, Patel, Parmar, Joshi, Bhanani, & Gor, 2013).

2.1.4 Economics of Kharai camel breeding. As of today, camel breeding and rearing is not a monetarily rewarding profession. High costs, low market price for camel milk and strict regulation of grazing areas by the forest department are major problems that plague the profession. A rational individual would have exited the profession, yet the breeders persevere on pure sentimental value.

The Fakirani Jats occasionally practice a secondary or tertiary profession. A few engage in farming of crops like *bajra*, *mag*, *guar* and *math* which are dry land crops. Studies showed that 67% of the breeders engaged solely in camel breeding and rearing and 37% are involved in both camel breeding as well as farming. Fakirani Jats primarily rent the camels from the Rabaris and use the camel milk for self-consumption or sell it. The Rabaris

usually practice other primary occupations, and the income from renting camels is usually ancillary to their main income. The monthly rent per camel is usually between 30-50 rupees. Currently no market for camel wool exists in Kutch. However, the wool is used to make accessories for the camels. *Anhoti* is one such accessory and it is tied around the udder of young female camels to prevent milking by calves (Sahjeevan, 2011).

Camel milk is the one marketable product that camel breeding yields. The milk is believed to have “healing powers”, and is believed to cure diseases like diabetes. However, breeders, especially the Rabaris refrained from capitalizing on this in the past, as they considered selling milk to be something as abhorrent as selling one’s child’s blood, this sentiment being a consequence of the reasons mentioned above. Lately however, this has changed due to the changing lifestyles of the breeders. Meeting economic ends has become more necessary than holding onto devoted tradition (Choksi & Dyer, 1992; Paniyil, 2016).

Fakirani Jats are now beginning to sell their female camels, for large-scale milk production. This camel milk is sold in local markets; the major markets for the Kharai camel milk are tea stalls and hotels around the Mundra, Lakhpat, and Abdasa region (Das, Patel, Parmar, Joshi, Bhanani, & Gor 2013).

The camel breeders are generally not landowners and have little or no assets other than their camels. Due to the lack of collateral, banks are unwilling to lend them money. They take loans from informal lenders at interest rates ranging from 5%-10%. These funds are utilised for rations, health care for the camels and other daily expenses. Therefore when camels are sold, it leaves the breeders with very little (Sahjeevan, 2011)

2.1.5 Religious significance of the Camels. In narrowing this broad spectrum down to our physical area of study, we realised that Camels are held in very high regard. As a community, the Rabaris are deeply religious, they mainly worship Hindu Gods and revere a few Saints, celebrating festivals in their honor. The religious attitudes of the community easily influence, or bear over

their breeding and rearing professional lifestyle. They believe that their lives, and those of their animals are in the hands of the Mother Goddess (“Momai Mataji”), and that they consider themselves to be the privileged guardians of the animals, for the duration of their mortal existence.

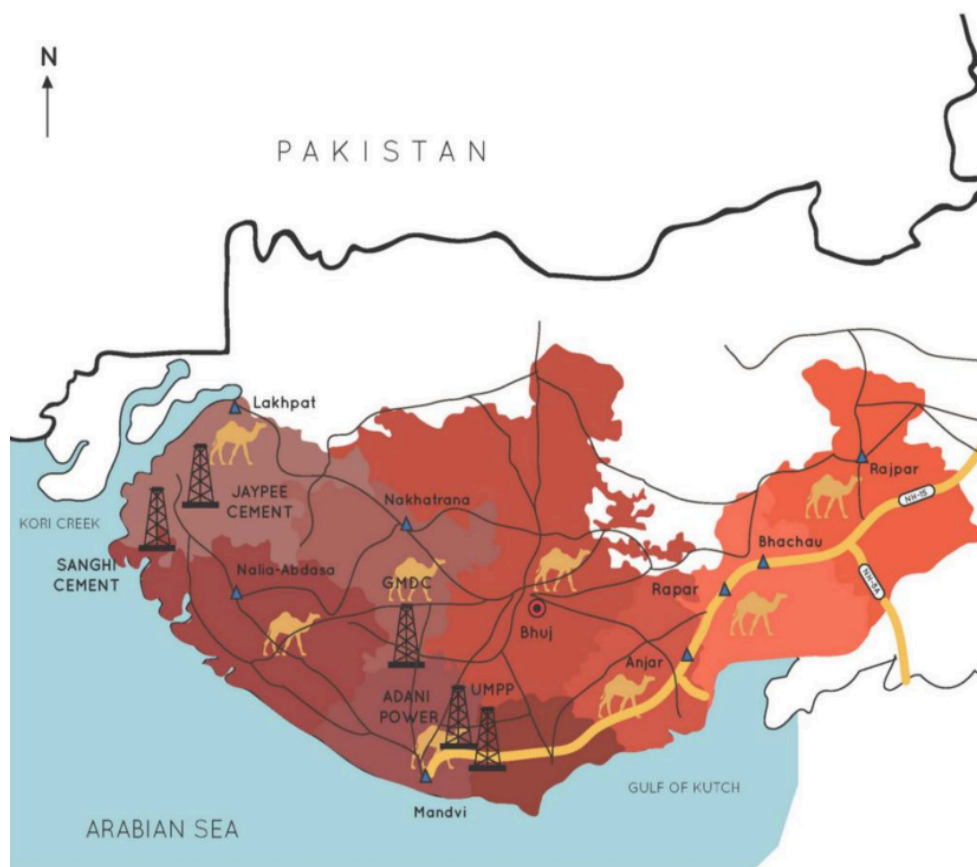
Before the community sets out for migration, religious rites are performed, extolling the journey to Mataji’s care. If an animal falls sick or dies during the journey, it is seen as Mataji’s will, and are slightly diffident towards the use of any form of medicinal cure.

As for camels, specifically, they are regarded as the ‘*vaahan*’ or ‘vehicle’ of the goddess. Historically, the Raikas of Rajasthan have considered the camels to be the divine vehicle, and this view is commonly shared by the Rabaris. As has already been mentioned, The origin stories of the Kharai Camels are also founded in religious belief. Additionally, the Rabaris also attribute sanctity to the female camels amidst their herd, by associating them to the goddess. Within a household, one female camel is also given the title of *being* the Mother Goddess, and is never sold. (Das, Patel, Parmar, Joshi, Bhanani, & Gor 2013; Dyer. C, 2001) .

2.1.6 Grazing and Migration Pattern. The Rabaris and the Fakirani Jats, being nomadic pastoralists, are identified as *maaldharis*- the one who keeps animals or what is called *maal*, which includes sheep, buffaloes, goats and cows. Due to extreme climate of Kutch, the *maaldharis* tend to migrate during the months of March and April and return to their villages during the monsoon season; yet it is obvious that the time period and route would vary as per the animals they possess. What remains a binding, collective aspect is that their vocation of pastoral nomadism sustains because they walk and travel places (Mukherjee, 2017).

In case of Kharai camels, they stay on the *bets* or mangrove islands during the monsoons and for the rest of the year, traditionally travel to nearby *bets* to graze for 2-3 days and are brought back to avail drinking water. Restrictions in accessing mangroves, industrialisation of the coastland causing threat to wetland mangroves and the declaration of coastal areas as protected zones, the breeders gradually started looking for alternatives.

As per the 2011 Sahjeevan report, in order to provide for food and water for camels, the camel breeders migrate within the Talukas or even the entire district and in some cases, to parts of Mehsana, Patan and Saurashtra, especially in the event severe drought. Breeders belonging to Lakhpat and Bhachau move to Kiro hill and nearby villages of Chhari Dhand, it being a vast wetland. Some camel breeders belonging to Pachchham of Bhuj taluka traverse to Banni villages in the west, namely Bhitara, Luna, Hajipir, Bhagadiya and Chachala. Rabaris from Nakhatrana and Mundra tend to travel towards Eastern Kutch, the Vagad region of Rapar taluka (“Rare Kharai camel species”, 2014; Sahjeevan, 2011)



Map 1: Migration Pattern of the Camels and major industries in the way

Source: (Sahjeevan,2011)

2.1.7 On Action taken by Sahjeevan and other local NGOs. A prominent NGO named Sahjeevan is working closely with Kharai Camel breeders to provide solutions for the multiple problems faced by them. Until very recently, the Kharai Camels had no recognition as a separate breed. Thanks to the efforts of

local organizations, specialists, and dedicated social workers, the National Bureau of Animal Genetic Resources (NBAGR) recently certified the Kharai breed as the ninth distinct breed found in India, separating it from Kutchi camel. The Kharai Camel was also declared an endangered species, because it was thought to be slowly dying out and its caretakers shifting to occupations other than breeding and rearing it (shastri, 2015; Shrivastava, 2013).



Image 5: Certificate of Registration of the Kharai Camel as a separate breed

Source: Discover India Program

Further, on, moving to the next chapter, we present how we conducted our own research, equipped with all the preliminary knowledge we had gathered using all our secondary sources.

The Elongated Spine – Findings, Observations and Analysis



Image 6: Three Kharai camel breeders Ahmed Taju, Salem Mohammad and Hassan Chotu

Sources: Discover India Program

Our research spanned over 8 days covering different parts of Kutch. A detailed questionnaire in hand, we investigated the Kharai camel breeding profession. The following chapter is a section-wise organization of all the data we collected by surveying 27 Fakirani Jat and Rabari households.

First in this chapter, we present the demographic information that pertains to number of households, number of members in the families, numbers of males and females, their age etc. We have also added data about households assets, facilities available to the breeders, water supply, electricity etc. to provide deeper insight into their economic condition. An elaborate section then describes all the facts and figures related to the Kharai camels. It includes the number of Kharai camels in each herd, their feeding and mating patterns and so forth. Then, we move on to explaining the socio-economic aspects in detail. This section describe the costs of breeding, the sale of camel milk, income and other such features. The association between the government and the Kharai camel breeders is one we wanted to explore since the very beginning. This chapter also outlines the information we acquired from interacting with government bodies like the Forest Department as well as representatives from local NGO Sahjeevan that is working closely with the government.

Quantitative data is arranged in a tabular format. We organized our numerical data using STATA and used it to analyze our qualitative data. Numbers, coupled with what we gained from interviews allowed us to derive logical and realistic conclusions, and these effectively portrayed the conditions of the Kharai camel breeding profession.

3.1 Demographic details

The geographical scope of our research consisted of three talukas; Lakhpat, Abdasa and Bhachau. This was due to the presence of a significant Kharai camel population in the area.

As per our literature review and information conveyed by the Sahjeevan coordinator, Mr. Mahendra Bhanani, there are between 50 and 60 Kharai camel breeders in Kutch. We managed to survey 27 of them, out of which 15 belonged to the Fakirani Jat community and 12 belonged to the Rabari community. The following Table 2 shows the distribution of villages our respondents belonged to.

Table 2

Location of Respondents

Taluka	Place	Freq.
Abdasa	Bhanadi	2
	Bhangorivand	1
	Desarpur	1
	Mohadi	3
	Nariyo	2
Bhachau	Jangi	4
Lakhpatt	Jhadwa	10
	Lakhara Velara	1
	Medi	1
	Dragavandh	2
	Total	27

We surveyed a total of 22 males and 5 female heads of households. The average number of female members in the household was 2.48 and that of male members was 3.03. The average age of the respondents was 47 years.. The average formal educational qualification of our respondents was 1.14 years, with the maximum being 7 years.

3.2 Household Assets

As has already been mentioned, with all the households surveyed, we gathered specifics about the facilities they have, receive, or have access to. Of the 27 households, 15 were *pucca* houses, and (almost) all of them were aesthetically pleasing, and modest, never reeking of any posh affluence. The exterior of all the Rabari households were decorated with patchy paintwork, and their inner walls, and floors were pasted with glitzy, yet tame tiles. Walls were decked with photo frames, either of Gods or of the members of the households, posing daintily. Of the 12 *kaccha* houses, we encountered two types of houses – the *Pakkhas*, and a couple of makeshift households, both of which the Fakirani Jats live in. Out grazing for months, they construct functional makeshift households, only bundled with their basic amenities. Lying on the bare ground, with nothing short of a tent over their heads, these

temporary household help the breeders sustain themselves, when on the move. The *Pakkhas* are the houses in which the members of community reside in when they're not on a migratory journey, and are settled in their village for a considerable duration of time. Commonly, the women take the lead in building these, out of mud and straw. However, probably keeping with the advent of industrial modernity, a few houses are built with thatched steel roofs, and have glass doors. Almost all Fakirani Jat households have a large saddle, called a *Kattho*. These were used on camel backs, by the community's early forefathers, but are just placed in the folds of the house, nowadays, possessing some inherent artefact value.

13 out of our 27 surveyed households enjoy electricity supply, and for the rest of the households, there is a heavy reliance on kerosene or oil lamps. Although this may be a limitation, it does a certain a certain beauty to their nights, as we ourselves experienced, when we spent one evening with a Jat household, dining under the dark, starlit sky, amidst the glow of these lamps. Apart from this, a few houses also make use of solar powered lamps.

Water scarcity is a pan Indian issue, and it is not only contained to rural spaces. Only 11 households had continuous water supply, and the rest undergo varied degrees of struggle to avail themselves of a daily supply. Few have to walk distances of up to 9km to collect water, few get water only once over an interval of 2-3 days. A few households get their water supply from a nearby tank, and a few have to depend on the services of a corporation for it. As for sanitation, only 4 households hadn't adequate provisions, the other 23 households were well equipped with basic facilities. 11 houses had a designated kitchen space, and almost all households cooked using a *chula*, the classic Indian wooden stoves, only 3 households had either LPG services. 21 respondents own mobile phones, and an interesting point to note was that, due to general lack of electricity, one respondent informed us of how he uses the nearby masjid (mosque) to charge his phone.

For the purposes of entertainment, presumably in their spare time, the breeders consume music, watch television, or listen to the radio; these were the more common responses. As far as other (quirky) responses are concerned, two breeders ranked 'sleep', and smoking beedis as their foremost sources of entertainment, respectively. 'Embroidery' was also mentioned, keeping with how this art is associated with, or indigenous to the communities of Kutch.

Landing on topics more tuned to our research, all the 27 households possessed livestock or came from a family of breeders. More specifically, though, 5 respondents had Kutchi Camels, and the other 22 housed Kharai Camels, which were our primary focus.



Image 7: A Fakirani Jat household in the wild

Source: Discover India Program

3.3 Camel Related Information

The survey we conducted yielded interesting information about the process of camel breeding and rearing. Out of the 27 individuals that we surveyed, 23 were engaged in the profession. It is interesting to note that during the course of our on-field research we did not come across a single Fakirani Jat who wasn't a camel breeder, as shown in Table 3.

Table 3

Members of community involved in camel breeding

Community	Involvement In Camel Breeding		Total
	No	Yes	
Fakirani Jat	0	15	15
Rabari	4	8	12
Total	4	23	27



Image 8: A proud Sher Mohammed with a pregnant camel

Source: Discover India Program

The next set of questions were aimed at gauging whether the respondent possessed Kharai camels, Kutchi camels or both. Out of the 23 respondents involved in camel breeding, 19 bred Kharai Camels, while 4 did not. 5 respondents out of these had a mixed herd, but the Kharai camel population either equalled or exceeded that of Kutchi camels. These results have been tabulated, as shown in Table 4 and Table 5.

Table 4

Number of breeders who possess Kharai camels

Do you possess Kharai Camels	Are you involved in camel breeding		Total
	No	Yes	
No	2	4	6
Yes	2	19	21
Total	4	23	27

Table 5

Kharai camel possession as per community

Community	Possession of Kharai Camels		Total
	No	Yes	
Fakirani Jat	1	14	15
Rabari	4	8	12
Total	5	21	27

It is imperative to understand the nature of the professional alliance between the Fakirani Jats and the Rabaris. While the Rabaris possess the Kharai camels; in that that they own the camels, they may rent them out to the Fakirani Jats and hence may themselves be relatively disengaged from the rearing and nurturing aspect. Having said this, it is important to note that whether it is the Fakirani Jats who own the camels or simply rear them or the Rabaris who were traditionally breeders but now rent the camels out due to monetary compulsions, there is no distinction in the importance the Kharai camel holds in both their lives.

After inquiry on the possession of Kharai Camels, the focus then narrowed down further, and questions pertaining to involvement of the members of the household in Kharai Camel breeding and rearing were asked. The results showed that on an average, there are 1.9 males per household involved in the breeding and rearing process, with the minimum from a total of 22 observations being 1 and the maximum going up to 4. This mean was significantly greater than that of females, with that averaging out to 0.31818. This indicated that there existed little to no female involvement in the entire process as compared to male involvement. The results have been tabulated, as shown in Table 6.

Table 6

Involvement in camel breeding

Variable	Obs	Mean
Males Involved in Camel Breeding in a household	22	1.909091
Females Involved in Camel Breeding in a household	22	0.3181818

On field observations and conversations with the breeders also yielded coherent information. Only in two or three cases were the women also involved in the grazing process to the extent that they would travel with the men. A startling exception to this trend though, was the youngest Fakirani breeder-12 year old Hanifa. She looked mature beyond her years and completely in control, clucking and calling out to her herd, and her innocent childlike nature only emerged when she smiled and initially shied away from the camera.



Image 9: Haneefa

Source: Discover India Program

In most cases, however, Fakirani women prepared make-shift houses and cared for the goats and buffaloes. They also played the crucial role of collecting fodder in the form of plants and mangrove leaves for the livestock. If they ever were to take the herd to graze, they were always accompanied by a male from the household/community. Similarly, Rabari women were engaged in wage labour and caring for the household, and tended to the buffaloes only once they were back in their sheds.

After understanding the extent of the involvement of family members, the next set of questions in the survey were aimed at interpreting the population and exchange (if any) of the Kharai camels. The distribution between male and female camels had been illustrated below, in Table 7.

Table 7

Distribution in a herd

Variable	Obs	Mean	Std. Dev.	Min	Max
Number of male Kharai camels in the herd	19	16.55	40.68554	0	135
Number of female Kharai camels in the herd	19	96.35	229.8087	0	765
Number of Kharai camel calves in the herd	18	3.333333	3.694193	0	10

Such a huge discrepancy, signified by the large standard deviation, in the data arose because the responses of Paancha Bhai Rabari, owner of the single largest herd of Kharai camels in Kutch, and the descendent of the Rabari brother who received the original Kharai camel from Savla Pir, were taken into consideration. He and his brothers are the proud owners of 900 camels. Though his familial occupation was traditionally camel breeding, Paancha Bhai realised that it wasn't profitable and rented his camels out to the Fakirani Jats. He expressed his desire to return to the profession as soon as the market for camel milk improves. He also attributed not selling his camels off to Savla Pir's instructions and because they are a symbol of his tradition and his family's past.

If Paancha Bhai is considered an exception, and his responses are not factored in, a more accurate analysis is obtained.

Table 8

Distribution in a herd without Paancha Bhai's herd

Variable	Obs	Mean	Std. Dev.	Min	Max
Number of male Kharai camels in the herd	18	3.388889	4.002042	0	15
Number of Female Kharai camels in the herd	18	22.05556	24.11851	0	81
Number of Kharai camel calves in the herd	18	3.333333	3.694193	0	10

As shown in Table 8, on an average one herd has 3.38889 male camels with the maximum being 15. The female camels in the herds generally outnumbered the males, with the maximum number of females in one herd going as high as 81. This can be attributed to the fact that breeders generally prefer keeping a few male camels because they tend to fight as the Kharai camels are known to be fierce (K. Aditi, 2010) and exchanging/selling the males on a regular basis prevents inbreeding. (Das, Patel, Parmar, Joshi, Bhanani, & Gor 2013). More on the buying, selling and exchange of camels will be covered in the subsequent sections.

How the breeders identified their camels was what we tried to understand, next. The responses to how they identify their camels is shown in Table 9.

Table 9

Means of identification

Means of Identification	Frequency
Inherent Sense	8
Branding	6
Names	3
By The Ears	1



e

Image 10: A Kharai camel herd grazing

Source: Discover India Program

On observation, it was evident that the breeders had a bond with their camels that was beyond the comprehension of someone not engaged in the practice with all their heart and soul. Years of experience gave the breeders confidence in their ability to inherently know which camels belonged to them. When their herd wandered, they knew that all the camels will follow the oldest male camel, which usually has a bell hung around its neck, and the breeders will know where their camels are. Paancha Bhai Rabari in his interview also expressed his confidence in the abilities of the Fakirani Jats, saying that if he ever goes to visit them, he may not recognise the camels but the breeders will not fail to identify their camels even in a highly mixed herd.



Image 11: A Kharai camel with a 'X' brand

Source: Discover India Program

However, a few breeders did brand their camels with symbols like a *trishul* (trident) or an ‘X’. It was understood that if a camel is sold, the old symbol will not be removed from its body, as a sign of respect and past ownership. Another interesting way of distinguishing the Kharai from the Kutchi was the ears, as the former have inward pointing ears. 3 respondents also said they name their camels.

After questions about identification, the questionnaire had a section pertaining to the expansion of the herd. Breeding related information was assimilated next. When questioned upon the ages at which the Kharai camels reach reproductive maturity, the following answers were obtained:

Table 10

Breeding age of a Kharai camel

Variable	Obs	Mean	Std. Dev.	Min	Max
Minimum Breeding Age for Males	22	4.090909	0.305997	1	6
Minimum Breeding Age for Females	21	3.380952	0.244033	1	5

As shown in Table 10, the age at which male camels can start breeding averages out to 4.0909 years with the minimum being within a year of their birth and the maximum being 6 years post. For females the mean, 3.38096, was lesser by almost a year.

Almost 85% of the respondents (17/21) said that their camels breed during the winter season, while the remaining said that their camels breed all year round. The interview with Dr. Seth Singh an expert on the Kharai camels and collaborator of Sahjeevan, revealed that the breeders practice nomadism due to the geographic migration that the camels undertake during winter to find a better place to mate. A breeder, Noor Mohammad Mubarak said that “the winter season is a special time for breeding.”

On-field interactions with the breeders led us to interesting information about the breeding process. A group of breeders said that they feed their male camels with *ghee* (clarified butter) and mustard oil when they are in heat. The breeder also spoke about a few indicators of the male being in heat, the most prominent one being them getting restless and straying from the herd. Interestingly, 2 breeders said that in their herd, they have a calf that is a mix of a Kharai female and a male Kutchi camel. The calf looked like its Kharai mother, with inward pointing ears and darker fur.

The average age, at which the breeders start milking the female camels was 3.777778 years, with the minimum being 2 and the maximum being 5. Additionally, the breeders told us that the females can be milked right after she births her first calf. An experienced Fakirani Jat breeder, Noor Mohammed Mubarak, told us that when the tide was high and the conditions were favourable for the camels to go to the mangroves, around 5 litres of milk per day could be obtained from the females. The data collected showed that on an average the camel yield was 4L/day, with the minimum being 2. The survey then focused upon whether the breeders engage in the sale of male and female camels.

Table 11

Age at which Kharai camel is fit for sale

Variable	Obs	Mean	Std. Dev.	Min	Max
At what age do you sell male Kharai camel	13	3.692308	2.015962	2	10
At what age do you sell female Kharai camel	5	5.2	2.949576	3	10

As shown in Table 11, a male Kharai camel is sold at an average age of 3.692308 years and a female at the average age of 5.2.

It is important to note that there are only 18 responses in totality, with 13 responses for the sale of male camels and merely 5 for the sale of females. This is because many respondents did not believe in selling their camels and hence answered in the negative.

Initially, the females were never sold and the males were sold within the community or the family. One Fakirani Jat breeder said that in his family, one female camel is christened ‘Mata Meri’ and considered to be divine. That female camel is worshipped and her milk is

never sold. Another reason for not indulging in the sale of a female camel, according to a few breeders is because Savla Dada (Savla Pir) said not to, and it is a part of their tradition now to not sell females.

Presently, due to monetary compulsions, they partake in the sale and purchase of camels. If a female is sold, the basis of it is majorly the milk yield and the reproductive and general health. She should also preferably be of a darker shade. For males, while buying camels the aspects that are focused upon are the height, and interestingly, the walk. The milk given by the mothers of both males and females should also be of a substantial amount.

Participation in the exchange of male camels was found to be slightly low, but simultaneously a trend in the answers was observed. The breeders who exchanged their male camels only did so every 3-4 years with neighbouring breeders or with Rabaris. This was done in order to let the males be within the community/family.

When information on camel by-products was collated, the following data was collected.

Only 20 breeders responded to the questions, with 90% of them saying that they obtain fine wool from the camels. The breeders holding yarns of wool in one hand and a stick in the other was quite a sight. Questions on whether that wool was marketable revealed that camel wool, though widely obtained, was hardly ever sold. The breeders used the wool solely to make covers for camel udders in their free time. The udder sacks, called *Cheko* or *Anhoti* were made to prevent suckling by female calves. Ropes from wool were also made for the camels. There were no other camel by-products other than wool. When, inquiry about 'Hyde' as a by-product was made in order to fill the questionnaire, the "No" was accompanied by an evident feeling of surprise and shock. For the breeders, trading the skin of their camels was no less than a sin. Seth Singh also assured us that, to the best of his knowledge, there was no illegal trade of camels in Kutch. There was far too much attachment and deep rooted traditions for such a scenario to exist, let alone thrive.

The next topic that was surveyed was the eating habits of the camels. The aim of this was to have a basic understanding of the extent to which the camels are reliant on mangroves for their sustenance, and whether they eat other wild plants or not.

17 respondents out of the 21 who possessed Kharai camels and were involved in the breeding process said their camels primarily feed on mangroves. That translates to approximately 81% of our respondent pool. On-field conversations with the breeders also resulted in added emphasis on their affirmative responses, with phrases such as “*Cher nahi toh Kharai Unthh Nahi*” (No mangroves equal no Kharai Camels) being a common utterance. They also expressed dissatisfaction with the restrictions imposed upon them and their camels, and the difficulties they may face while taking their camels to graze.

Many respondents however, also said that their camels feed on wild plants that grow in the area, namely ‘Desi Bawariya’ (*Acacia Melodica*), ‘Mitthi Jhaad’ (*Salvadora Persica*), ‘Khaari Jhaad’ (*Salvadora Oleodes*) and Nimbdo (Neem).

The diseases that the camels may fall victim to were surveyed next. The topic of Kharai camel health was of significance to the research, and of importance to the breeders. The survey revealed a few common ailments the camels may fall victim to. The most frequent answer was ‘Fitoda (Trypanosomiasis)’ and ‘Khaji (Dermatitis)’ followed by fever, dizziness and stomach infections. Fitoda, an infection caused by mosquito bites and Dermatitis, an infection that causes inflammation of the skin and results in rashes, blisters and itching (Khaji), are a cause of immense displeasure to the camels and concern to the breeders.

The yearly camps set up by the government, where the drugs for fitoda are provided for half the market price, are a source respite for the breeders. Sahjeevan, the NGO collaborated with the government to make these medications more accessible. Yet, on field interactions revealed that not all breeders are satisfied with the help, as it is ‘too expensive’, ‘too infrequent’ or ‘too far’. For many respondents, government help was available in the past, but was presently unavailable.

Interestingly, while not many respondents said yes for questions related to usage of traditional remedial measures, a few intriguing responses were garnered. The breeders either bought a ‘powder’ for camels suffering from Khaji, and one breeder said he used to rub cold buttermilk (chaas) on their body. 3 breeders said they heat metal (damb) to provide relief to fever stricken camels, and make kaadha (a thick medicinal solution) as well. 2 breeders said they use a mixture of tea leaves and Jaggery boiled together, to help the camels suffering

from Attak (Heat waves). Being in the water also provided relief from dermatitis and dizziness.

We then asked the respondents about what they do when their camels die. Every respondent said that they leave their camels out in the open for scavengers. They believed that this is a part of life, and though they feel extremely dismayed when there is a death in the herd, they grieve for 3-4 days and then move on. They had reached a certain understanding when it came to the natural cycle of birth and death.

3.4 Socio-Economics of Kharai Camel Breeding

As mentioned previously the profession of Kharai camel breeding is interwoven tightly with the Fakirani Jat and Rabari tradition. One can trace the relationship between the two spheres back to folklore, and though the origin of such a connection can be disputed, its presence definitely cannot be. The profession of Kharai camel breeding has become a quintessential trait of the Fakirani Jat and Rabari cultures. The knowledge of the process has become an asset and its practice, a norm. It is such norms, when accepted by a group of people, that create or add to existing culture. These group of people become, or are categorised as a society.

We understand socio-economics as the influence economic activities exert on social processes and vice versa. The Fakirani Jats rely primarily on breeding and rearing camels, therefore their livelihood comes from the sale of camels or the sale of camel products.

The practice of secondary or tertiary professions (sources of income) within the Fakirani Jats is negligible. The costs a Fakirani Jat breeder incurs on his camels is mainly:

1. If the camels are rented or loaned
2. If the camels are given fodder other than that which is naturally available to them

The Rabaris on the other hand rarely practice camel breeding or rearing as a primary occupation. This is because the Rabaris majorly own the camels and rent them to the Fakirani Jats. The income Rabaris get from renting their camels is secondary if not tertiary to the

income they get from working at the nearby cement or fertilizer factories or rearing other livestock such as buffaloes. The reasons and consequences of this occupational shift will be elaborated on in the occupational migration section.

A review of the existing literature led us to believe that the market for camel milk was almost non-existent. To our pleasant surprise, our on-field study yielded that this was not completely true. A market for camel milk is emerging with specialised “Camel Milk Collection Centres” being established throughout Kutch and an operations chain involving the breeders, agents, centres and MNC’s. Dr. Seth Singh revealed to us that Amul has purchased 10,000 litres of camel milk and is producing a new line of camel milk chocolates. This has provided a much needed boost to the camel milk industry in terms of demand and recognition. Even though the prices for camel milk are still meagre with a mean price of around rupees 50.53 per litre, as illustrated in Table 12, the increasing demand will eventually allow the breeders to ask for higher prices.



**Image
12: An**

**agent arriving at a milk collection centre his bike strapped with containers of
Kharai camel milk**

Source: Discover India Program

Table 12

Price of Kharai camel milk in the market

Variable	Obs	Mean	Std. Dev.	Min	Max
Price per litre for Camel Milk	15	50.53333	5.767726	35	62

On an average around 2.86 litres are sold and around 2.6 litres are consumed by a household. Table 13 shows the average quantity of milk sold and consumed per month and the income from it.

Table 13

Usage of camel milk by a household

Variable	Average (Litres/month)	Income
Self Consumption	78.94737	3989.473501
Sold	85.71429	4331.428502

Note. Calculated with average litres consumed per day as 2.631579 and average litres sold per day as 2.857143 and price is 50.33

The average income per month from the sale of camel milk is around rupees 4331.42. In addition to this, a household could *potentially* (emphasis added) earn rupees 3989.47 more. This potential income could be understood as the opportunity cost of self-consumption.

A household that breeds camels has 5.51 members on an average and an annual average income of rupees 51976.80 just from the sale of camel milk. This means that the per capita income solely from the sale of camel milk is rupees 9433.17 as illustrated in Table 14.

Table 14

Per Capita Income solely from the sale of camel milk

Variable	Price Per Litre	Average (Litres/month)	Monthly Income	Annual Income	Per Capita Income
Camel Milk Sold	50.533	85.71429	4331.400217	51976.8026	9433.17651

Note. Average members in a family is 5.51

The per capita income solely from the sale of camel milk calculated above is just a fraction of the National Per Capita Income. This is obviously not enough even for sustenance and therefore the breeders have to turn to a more painful alternative, selling their camels.

Table 15

Market price of a Kharai camel

Variable	Obs	Mean	Std. Dev.	Min	Max
Cost of Buying Male Camel	17	20323.53	8448.264	3500	35000
Cost of Buying Female Camel	14	17857.14	6951.559	3500	30000

The market prices of female and male Kharai camels show clear disparity. Interestingly the female camels seem to fetch a lesser price than the males despite their potential for providing milk and offspring. These prices are extremely low when compared to that of a buffalo. Paancha Bhai Rabari, jokingly but very truly states;

“Buying a buffalo is as expensive as buying a Nano (Tata Car)

If camels become as expensive, nobody will look at buffalo.

If you go somewhere to buy a buffalo it will cost you around two to two and half lakhs of rupees.”

Paancha Bhai has around 30-40 buffaloes which he rears and breeds himself and around 900 camels, all of which are rented out to the Fakirani Jats. This reluctance to breed his camels himself clearly shows a lack of monetary incentive. It also points towards the poor economic conditions the Fakirani Jats undertake willingly by paying rent on the camels, commission to the agents and bearing any other cost on the herd under their care. The following table shows the cost of maintaining a Kharai camel.

Table 16

Cost of maintaining a Kharai camel

Variable	Obs	Mean	Std. Dev.	Min	Max
Cost of maintenance (Per camel/per year)	18	4108.333	3567.758	100	12500

This table clearly shows a huge discrepancy in the data collected. Such a large standard deviation (3567.758) indicates that different breeders have substantially different maintenance costs. For convenience, we shall take the mean as done previously. The average maintenance cost per camel per year is rupees 4108.33, which is extremely high considering the cost of fodder has not been factored in. This is because the camels usually feed on mangroves and other wild plants, and only extreme monsoons or droughts cause the breeders to look for alternatives. Presumably, the reason there is such a huge gap between the cost of maintenance is due the unequal distribution of government sponsored health care for the camels.

The economic difficulties breeders face have large sociological effects. As communities that have been breeding the Kharai camels for generations, selling them is akin to selling your history and culture. Whenever the question of selling their camels is asked the reply never comes without a hint of remorse. For the most part of our on-field research, when asked about why they still engage in camel breeding despite the harsh economic conditions, pat came the reply; “because we like it.” This sense of joy they derive from keeping their traditions alive is at risk as of today.

Another integral part of their culture is also in jeopardy, their nomadism. Constant relocation does not make the task of transporting a perishable good like milk, easy. In fact, the only reason breeders scattered over the largest district in Kutch can even supply milk for a large client such as Amul is because of the presence of middlemen. Agents embark each morning on their scooters and bikes to the remote villages where the breeders are camping and return with the harvest for the day by noon. Camel milk collection centres set up around the district then weigh the milk and transport it to a plant for further processing and storing. This forces the breeders to settle down instead of wandering and living with their herds.

During the on-field study we interviewed and surveyed 15 Fakirani Jats out of which only 1 was accompanying the herd day and night. The others lived in settlements of *pakkhas*

(mud and straw huts, not to be confused with pucca which is a permanent house) and usually migrated on a seasonal basis. The others faced a daunting task, tracking their herds each morning. One particular Ahmed Abdullah Jat acknowledged how cellphones eased this task substantially. His herd had been missing for a couple of days when a fellow breeder spotted the camels and notified him.



Image 13: Ahmed Abdullah Jat, the man who lost his camels

Sources: Discover India Program

All of these hardships are leading a lot of breeders to one particular decision, to leave the profession.

3.5 Migration

Before plunging into the field-work, we decided to treat the professional and geographical migration of the breeders in accordance with each other. This is because these factors tend to revolve around the vocation of camel breeding and pastoralism. Also, professional and geographical migration is largely affected by the problems in practicing this profession and the overarching scope for its sustenance.

Dr. Seth Singh and Dr. Pankaj Joshi both informed us that Sahjeevan was working towards mobilising the camel breeding communities, owing to the fact that the younger generation was shifting to other professions due to the hardships faced in a nomadic/pastoral lifestyle and both the Kharai and the Kutchi camels were dwindling in numbers. Hence, the task at hand went beyond getting the Kharai camels registered and called for the creation of a forum where the breeders could voice their opinion, concerns and look for means to get remuneration out of this vocation.

As Table 17 illustrates, out of the 15 Fakirani Jats surveyed, 66.6% had camel breeding as their sole profession and 86.6% practiced it as their primary occupation. There were 3 Fakirani Jats for whom this was a secondary occupation and they relied on other means of income like farming and wage labour. One of the Fakirani Jats owned camels but had also started rearing buffaloes. Among the 12 Rabaris who we met, 7 of them practiced camel breeding while the rest had driving, guest-house keeping and wage labour as their primary source of occupation.

Table 17

Occupational dispersion

Occupation	Community		Total
	Fakirani Jat	Rabari	
Camel Breeding	10	7	17
Camel Breeding, Farming	1	0	1
Camel Breeding, Wage Labour, Farming	1	0	1
Camel Breeding, Wage Labour	1	0	1
Camel Rearing	1	0	1
Driver	0	1	1
Guest House Keeper	0	1	1
Homemaker	1	2	3
Wage Labour	0	1	1
Total	15	12	27

Note. Occupation is listed as primary, secondary and tertiary respectively

According to the sample we collected, it can be interpreted that there isn't a complete shift in the occupation among the Fakirani Jats. This could also be explained through a general observation; the Fakirani Jats rely on the camel much more than other livestock as compared to Rabaris, who in most circumstances rent their camels to the Fakirani Jats. Either the Rabaris were completely involved in camel breeding and those who had shifted professionally, also earned on a monthly basis by renting out their camels.

Table 18

Has a family member migrated?

Migration of Family Member	Freq.	Percent	Cum.
No	7	36.84	36.84
Yes	12	63.16	100
Total	19	100	

To get a sense of the continuity of camel pastoralism, the extent of involvement among other members within the breeders and the change occurring in their life-styles, we considered it necessary to enquire about the kind of migration the family members have undergone. Out of the 19 people who responded to this question, 63.16 % said that their family members had migrated. Out of this percentage, 5 members had migrated for educational purpose and other 5 had migrated for occupational requirements. The other 2 reasons were not specified to us. One of the respondents shared that the member who had migrated to acquire education outside had to return due to lack of financial sources.



Image 14: Fakirani Jats setting up camp as they migrate

Source: Discover India Program

Table 19

Do you migrate geographically?

Geographical migration	Freq.	Percent	Cum.
No	4	21.05	21.05
Yes	15	78.95	100
Total	19	100	

As Table 19 shows, 19 respondents were asked whether they migrated at all, out of whom 15 answered that they migrated geographically for grazing purposes and 4 migrated for professional reasons; although there were 6 respondents whose geographical migration was linked with professional migration. Out of the 15 who migrated geographically, 13 of the

breeders answered that they migrated on a seasonal basis, during winter in search of fodder; among these, one respondent answered that he migrated during summer. This was reiterated by Seth Singh when he said that the herders stayed on the mainland at a stretch of 3-4 months during the winters, as that was the breeding season and the period when female camels would give birth to the calves. Among these, 2 respondents migrated for professional reasons as well. The respondents who migrated seasonally were Fakirani Jats, which affirms that they, as compared to the Rabaris have retained nomadism. Table 20 illustrates the range of routes taken by the herders when they geographically migrate.

Table 20

Migration Route

Migrated from	Migrated to
Nimbari Vand (Mohadi)	Kosa Kerwand
Mohadi	Nakhatrana
Desarpur	Vitron
Jangi	Ajipirudi (Banni)
Jangi	Radhanpur (South Gujarat)
Jangi	Charijand
Jangi	Hajipir-Chahridun

Some of the breeders, especially those living near the coastline tend to leave their camels in the sea during the monsoons and otherwise, in the jungle overnight. The affinity to the animal is such that as per one account, the camels are sold only because of restraints and that they have enough faith that the camels won't be sold further and it was ensured that they stay within the community. A few of the respondents do not employ traditional remedial methods any longer and tend to rely on often sporadic government facilities. There is also a tendency to keep other livestock owing to the fact that the market for camel products is in its formative stage. One of the respondents stated that her sons wouldn't take care of the camels and neither was there enough money to hire grazers.

Hence, despite the nature of nomadism, there is variation in the way this profession is practiced among the herders and even the communities, while the norms they are supposed to abide by are very much homogenised.

In today's scenario, the rapid increase in industrialisation and the subsequent land encroachment, the nature of execution of developmental strategies in Kutch and the urgency to protect the depleting mangroves have not just affected the herders' course of habit, but also brought a stage where they reevaluate, reconsider their professional inclination and their overall identity- a lineage bearing crucial socio-cultural undertones.

The herders are compelled to alter their routes because of the increasing number of industries and limited access to drinking water for camels, especially in summers or when they return from the islands; one of the respondents shared that the camels then need to travel for at least 9 kms for potable water. The activities carried out by salt-harvesting companies blocks the high tide needed for camels to commute. There is a conflict with their traditional understanding of open lands and mangroves being their natural habitat which eliminates the question of ownership and the current conventions that the forest department, coast guard and the BSF abide by. They are restricted from going to mangroves and grazing pastures; the deliberate plantation of *Videshi Bawar* is not only detrimental to the camel's health but also a hinderance in travelling to the coasts and there isn't enough availability of permits and government loans. One respondent even informed us that they were physically assaulted by the forest officials while migrating geographically.

3.6 Government Initiatives

When asked if the government is instrumental in supporting their profession, we got mixed reviews from the Rabari and Fakirani Jats. Out of the breeders surveyed 86.6% said that government medical help were easily available to them, out of which 23.07% were Rabaris. The Rabaris rent their camels to the Jats and from then on, it is the responsibility of the Jats to look after their health, food and reproductive requirements. Thus, if there is anybody who reaches out for government health care and support for the camels it is the Fakirani Jats. Table 21 illustrates our results.

Table 21

Availability of Medical care as per community

Community	Government Sponsored Medical Care		Total
	Easily Available	Unavailable	
Fakirani Jat	9	1	10
Rabari	4	1	5
Total	13	2	15

Only 1 respondent from both communities said that government help is not available to them. This may be because they are still wanderers and prefer the nomadic lifestyle. They do not reside in one fixed space and thus, the government cannot help them since they do not fall under the jurisdiction of any of its branches. Even if they do fall under the immediate region of control of a specific local government, they do not reside in that region long enough for the government's health care policies to be applicable to them.

Table 22

Usage of traditional remedies

Community	Do you use Traditional Remedies		Total
	No	Yes	
Fakirani Jat	3	5	8
Rabari	3	4	7
Total	6	9	15

As shown above, in Table 23, in the absence of governmental health care for their Kharai camels, some Rabari and Fakirani Jats use traditional home remedies for their camels in the event of diseases. Out of 8 Fakirani Jat respondents 5 use traditional methods to cure their camels of infections. One such home remedy as mentioned earlier is the combination of tea leaves and jaggery in boiled water made for the Kharai camel to consume if diagnosed with attack or heat waves. Buttermilk is used to cure certain skin problems such as *khaji*.

Table 23

Is the government supporting camel breeding?

Government Initiative	Freq.	Percent	Cum.
No	14	60.87	60.87
Yes	9	39.13	100
Total	23	100	

It is not only a question of whether the breeders have access to governmental health care for their camels but also a question of whether the government offers it to those in need. It is a question of accessibility rather than availability. 60% of the breeders who were asked if the government has provided them with medical care for their camels said that the government by itself has never reached out to them. Local NGOs like Sahjeevan beg to differ. It is not like the medical drugs required to treat the camels were not offered by the government. The government does allocate funds to each taluka. The amount allocated depends on the camel population of that region. The drug too, is provided by the respective government department. The drug is made available to any breeder who needs it for his camels but if disease suddenly infects 10-15 of their camels from a herd of 40-50, the breeders do not have enough money to purchase the drug. Their income from camel breeding is already meagre and the amount spent to purchase the drug counts as an overhead expense which they may or may not have accounted for. The drug is expensive in relation to the income of the breeders. The government is now realising that diseases put the Kharai camel in a pathetic physical condition. In such a state, the rate at which they produce milk decreases significantly.

Thus, to aid the breeders and to ensure accessibility along with availability, Sahjeevan in cooperation with the government has come up with a preventive dose for the camels. The consumption of this preventive medication prevents the disease from its very source and is instituted every year. It is not given in the form of a vaccine since it is an ongoing treatment. The drug is more useful for Kharai camels. Repeated contact with saline water leads to the contraction of several water-borne diseases. The preventive dose helps keep dermatitis and other such skin infections at bay.

Initially, the government used to arrange camel vaccination camps through Sahjeevan. Things have changed after the introduction of the preventive drug. Now the government meets directly with the breeders and handles the treatment. With the increase in camel milk sales, the standard of living of the breeders has improved. They can now afford expensive government treatment for their camels. They have access to veterinary services. If the camels are faced with lethal diseases that are not as instantly curable as minor skin infections, the breeders can approach the government and treatment is provided to them free of cost.

This chapter spanned through the socio-economics of Kharai camel breeding, the details of the households we surveyed, their possession of Kharai camels as well as the government's contribution to the profession. To support the narrative on all of the above points, we provided the required numerical evidence. The tables encapsulated the data collected from 27 households through the survey and questionnaire method. Information from the interviews and focus group discussions that we conducted were interspersed with the interpretive analysis of the data tables. Having provided adequate information on the Kharai camels and breeders as well as the economic association between the two, we move on to Chapter 4 which is a more a compilation of our observations on field than a presentation of data.

The Hump – Findings, Observations and Analysis



Image 15: Meena Ben, Vice-president of KUUMS

Source: Discover India Program

We drew multiple inferences from the statistical analysis in the previous chapter. For starters, we realised that there is little or no external involvement when it comes to the breeding of the camels. No forceful breeding is conducted for the purposes of selling or to increase the herd size. The breeders still follow traditional methods of care-taking, and feed the camels clarified butter and mustard oil when they are in heat. Hence, they are actively trying to preserve their knowledge of camel breeding. The only party that has entered this equation in the recent past is Sahjeevan. Through the joint efforts of this organisation, the communities and the *Kutch Uunth Uccherak Maaldhari Sangathan* representatives from these communities, the government has recognised the Kharai camel breed as a separate breed and has started giving support to the breeders in the form of vaccinations, preventive drugs and so on. This is one significant change that the breeding and rearing process has undergone, as compared to traditional times.

On the flip side of the coin, we can also infer that the costs of caring for these camels has significantly increased. The breeders who were earlier free to let their camels graze are now bound by restrictions and have to constantly either avoid arguments with the forest officials or reason with them in the hopes that they understand. More on this is in the subsequent sections.

We can also understand that the economic hardships involved in the sustenance of this profession has forced the Rabari community, who were earlier breeders and engaged in nomadism to indulge in a huge occupational shift. They still rear livestock, but what were earlier camels are now buffaloes. Almost every Rabari household that was surveyed had buffaloes, and also practiced wage labour at the nearby cement factory. A few Rabaris did feel bad about straying away from their traditional profession, and expressed their desire to return to the same, but mostly all of them were upfront about the fact that there is no money in the profession and it is not profitable for them to continue. Almost all Fakirani Jats on the other hand, were still aware of their traditions and were trying to preserve their profession. A few of them also indulged in wage labour to support this profession.

As mentioned previously, we went on-field with a certain notion about the market for camel milk and the population of the Kharai camels. The interview with Dr. Seth Singh and with Pankaj Joshi painted a fairly positive picture in front us, saying that there exists a conversation with MNCs like Amul to produce camel milk chocolates, and the market for

camel milk will surely improve. Interactions with the breeders and the analysis of economic data collected via surveys shows that presently, the market for camel milk isn't very profitable. The breeders attribute this poor market to misconceptions that exist in the mind of people when it comes to camel milk and the skepticism with which companies approach the same. Another reason for the poor returns from camel milk, according to us, is the fact that the breeders consume almost 50% of the milk that they get, and sell the rest. Selling camel milk is any way a fairly recent trend, the emergence of which can be traced back to economic hardships. A lot of breeders have still not fully accepted it. Upon analysis of the results of the data obtained from questions regarding the sale of male and female camels, it can be extrapolated that at large, the breeders still refrain from selling the females. It is a part of their age old tradition to respect the female camel and associate her with Momai Mata Ji. The price for females was also found to be relatively low.

While our assimilation, analysis and inference of data encapsulated our findings from on-field, there were little bits of our research, that did not fit in these categories due to the fact that they were unquantifiable exchanges, relationships that we observed. The information presented herein, is not an outcome of numerical or factual analysis. For instance, the brotherly relationship between the Rabaris and Fakirani Jats. We saw this warm, cordial relationship manifest right before us every time individuals from the two communities interacted with each other. Similarly, the mangrove depletion matter became a heated argument between the forest officials and the Fakirani Jat camel breeders right in front of our eyes. The first two sections in this chapter thus, are a reproduction of what we witnessed through our eight days of research. These vivid recalls are supported by numbers but are not solely based on them. Quantitative data is used only to legitimise our observations. This chapter, then, is more aptly, an account of our experience and personal observations as opposed to being an account of responses from the breeders.

4.1 The “Mangrove Depletion” Debate: Two sides of the same coin?

The depletion of mangroves is a real problem for the Kharai camels and their breeders. A few breeders do not believe that the mangroves are depleting while others say that the depletion is drastic. The Forest Department has its own views. This section will delve into the three sides of the mangrove debate in Kutch by explaining the point of views of the breeders as well as the Forest Department. It will also highlight the various complications and difficulties faced by the breeders in accessing the mangroves.

“Any animal can swim if you put them under adverse conditions”, said Dr. Seth Singh, an expert from Sahjeevan. “The Kharai Camel is different because they swim throughout the year by themselves, in order to reach Mangroves and back, in search of food”, he continued. The point that he was trying to make was that, for the Kharai camels, swimming was second nature. Respondents who were asked about the eating habits of the Kharai camels responded by saying that while they do eat other local plants like *nimbdo* and *jara*, their staple diet is mangroves. To ensure stable health and adequate milk production, they must stick to their staple diet. The concern of mangrove depletion goes beyond Kutch to as far as Mumbai and the Sunderbans. It is a scientifically researched and universally established fact that mangroves are depleting. The Forest Department of Kutch concurs strongly while a few breeders beg to disagree. The following is a breakdown on the different sides of the mangrove depletion debate:

4.1.1 The Breeder’s side of the story.

Table 24

Opinion poll on mangrove depletion

Do you think mangroves are depleting	Freq.	Percent	Cum.
No	9	52.94	52.94
Yes	8	47.06	100
Total	17	100	

As shown in Table 24, 9 out of 17 breeders think that the mangroves are far from depleting because of the Kharai camels. In a heated focus group discussion with two representatives from the forest departments and two Fakirani Jat breeders, the breeders' views about the issue were revealed. The Kharai camel breeders, at least those of them who do not think mangrove depletion is an issue, are of the opinion that the mangroves are growing because of Kharai camel grazing. When a Kharai camel bites of the topmost leaves of a young mangrove plant, its saliva fertilizes the stem. Thus, new offshoots grow faster from the same stem. It is the froth from their mouths that helps to regenerate them and as much as four new branches can grow out of one torn stem. Additionally, when a Kharai camel steps on the ocean bed surrounding the mangroves, it makes small indentations in the sand in which mangrove seeds can fall. According to the breeders, the Kharai camels are helping the cause of mangrove conservation and proliferation. Mr. Mahendra Bhanani who is a Sahjeevan representative working closely with the breeders also clarifies that the mangroves are depleting because of the following two reasons:

1. Industries in Mohadi release harmful pollutants into the ocean which are detrimental to the growth of mangroves
2. During periods of drought, even cattle breeders take their herds to feed on the mangroves. Cattle cannot swim into the water and hence, eat the mangroves on the embankments which are barriers to strong waves and also prevent receding coastlines by holding sands on the shores.

Aga Khan, the seventh descendant of the revered Savla Pir, is a crusader for the cause of the breeders and their most followed representative. He rejects the claim that mangroves are depleting because of Kharai camel grazing. He says that although Kutch is a dry and arid region and faces draughts very often, the mangroves never decrease in number. When asked if it is the fault of the breeders that the mangroves are decreasing, Khan denies by saying that the mangroves are their "*rozi roti*" which is why they take care of them dearly. If the number of mangroves was dwindling because of the Kharai camels and their grazing, the mangrove forests would have vanished 300 years ago!

The Kharai camel breeders are extremely cooperative with the Forest Department of the region but they do face several complications. The Forest

Department has begun to ask for permits and other such legal documents from the breeders. In the absence of these papers, the breeders are not allowed to walk into mangrove cultivations. A Fakirani Jat explained that he is unaware of these legal requirements. The breeders have always thought that access to mangroves is their right. They do not believe in paying for access to mangroves. The Forest Department has also planted *Videshi Baawar* (babool) in the land that preceded the mangrove areas. These plants have sharp thorns and eating them causes stomach infections in the Kharai camels. The Forest Department has ensured that neither human nor camel can pass through babool cover, and enter the mangroves. In some areas, Kharai camel grazing is officially banned. Forest officials in these areas often ask for heavy bribes to let the breeders pass. This has created a deficit in food resources for the camels and has ruined traditional grazing routes.



Image 16: Aga Khan Savlani, spiritual head of the Fakirani Jats

Source: Discover India Program

4.1.2 The Forest department's side of the story.

Table 25

Opinion poll on mangrove depletion according to village

Place	Do you think the mangroves are depleting?		Total
	No	Yes	
Bhangorivand	1	0	1
Jangi	2	2	4
Jhadwa	3	2	5
Lakhara Velara	1	0	1
Mohadi	0	1	1
Nariyo	1	0	1
Total	8	5	13

The Forest Department is in fierce disagreement with the above points. Forest guards H.P Verala, and J.P Dangar who work at Jakhau coast explain that the mangroves in the coastal regions of Kutch are depleting mainly because of Kharai camels. The following are the ways in which the camels are an obstacle to mangrove conservation:

1. The government has also pledged to conserve mangroves in the Kutch region. It has proposed several plans for conservation according to which the forest officials are required to cultivate plantations in select areas to increase mangrove cover. The Kharai camels enter these plantations and trample over young saplings. The forest department has to face the music from higher authorities.
2. The Kharai camels walk through mangrove plantation patches and their hooves create deep impressions in the sand. The roots of the mangroves get destroyed.

The forest officials understand, however, that the Kharai camel requires mangroves for survival and the breeders require the Kharai camel for their sustenance. They are trying to employ a liberal attitude towards the camels and the breeders. They

understand that the camels are dependent on mangroves and thus, some amount of grazing is being permitted. Verala proudly says that he is sensitive of the breeder's difficulties but he has his own set of orders that he must follow.

The Kharai camel requires the mangroves but the Forest Department is working very hard to conserve the mangroves. If free grazing on the mangroves is permitted, either the mangroves will grow owing to the Kharai camel or will deplete due to overgrazing. If the Kharai camel breeders decide to graze their herds on vegetation other than mangroves, milk production and reproduction of the Kharai camels will be heavily affected. It is evident then that the Kharai camel and the mangroves are inextricably interdependent on one another. The government is well-aware of this interdependence but is torn between who to save - the Kharai camel which is livelihood of so many people or the mangroves which are precious to the environment.



Image 17: Focus group discussion

Source: Discover India Program

4.1.3 The government in association with Sahjeevan. The Forest Department's stance, however, is not the only one in this entire debate revolving the mangroves, and nor is the breeders'. They are both significant views, and require considerable representation. In in the process of achieving this

representation, the government is a major stakeholder. Not just major, it is almost the most essential participant, which stands as the mediator between the two parties.

Sahajeevan is an important organization that is attempting to engage with the government, making them aware of the issues at stake, and streamlining this process. On its own, it is undertaking several initiatives to gain an understanding of the situation, keeping the interests of every party in mind. Pankaj Joshi, the Sahajeevan representative we interviewed informed us of how they have canvassed and identified thirteen clusters across Kutch, as spaces where mangrove restoration is possible, and this caters to, and resolves the Forest Department's concerns. Further, they have recognized the worth of the breeders' traditional knowledge about the mangroves, and how camel grazing could prove beneficial to the ecosystem. However, this information isn't necessarily phrased with technical language, and the bulk of it is something that the breeders just know, or have acquired, with experience. For this information to be validated, and be recognized by the government, it needs to be grounded in scientific research. Acknowledging this, Sahajeevan works towards publishing the information they acquire, from the breeders, in the form of Reports, and present these to the government. This is also their way of ensuring that the voice of the breeders is heard, and taken seriously.

They also publish these reports in the local language, in Gujarati, to ease the understanding of the concerned, relevant officials in the government. With these efforts, the government gains an actual understanding of the varied views of the opposing parties, and is made aware of the fact that any action they propose, or take must take all views into account. All these reports include actual working plans for implementation can happen, and is not limited to informing the government about what the situation is. Both short term and long term agendas are outlined, after having taken the views of the Forest Department and the breeders. The process of creating these agendas is also something that Sahajeevan facilitates, by providing a platform where the breeders, the Forest Department, and the Researchers engage in discussions.

Sahajeevan is not only proposing or presenting what the government could do, it is also working in partnership with certain industrial organizations to translate reports into actual groundwork. When it specifically comes to the restoration and conservation of grazing routes for the camels, Sahajeevan means to replicate the success it enjoyed with the restoration of grasslands for the Banni buffaloes, in the past five years.

They instituted a Camel Breeders Association, as this would empower them with one unified voice, which is necessary to build some political will. Where required, Sahajeevan is also taking the legal route, exercising the Forest Rights Act, and the Rights of the breeders' voices to be heard. Depending on what the breeders' views are, placed alongside the Forest Department's requirements, the Researchers gain some direction, and are able to create substantial plans for the government.

Recently, as far as capitalizing on camel milk, and churning economic benefits for the breeders, Sahajeevan was able to involve the Gujarat Milk Marketing Federation (GCMFF) and AMUL in the process, and this found proper success, as AMUL itself is investing in camel milk now, and introducing it into the markets.

For the coming years, Mr. Pankaj Joshi, an official from Sahajeevan instinctively believes that they will be able to better the situation as far as the restoration of natural grazing spaces go.

4.2 The Rabaris and the Fakirani Jats – Professional and other alliances

The Rabaris and the Fakirani Jats are bound by a professional alliance. While the former is the owner of the Kharai camel, the latter is its caretaker. The strongest example of this is Paancha Bhai Rabari's relationship with the Fakirani Jats. Paancha Bhai and his two brothers collectively own 900 camels; theirs was the largest herd we came across.. 400 years ago, Savla Pir entrusted Paancha Bhai's ancestors with 2500 camels. They were told that they would be the owners of the camels but they could rely on his (Savla Pir's) devotees, the Jats to look after them. Thus, the first

professional alliance was forged by Savla Pir. As time progressed, Savla Pir's followers branched out into different sub communities. The Fakirani Jats are that fraction of the large Jat community that follow Aga Khan.

Paancha Bhai trusts that the Fakirani Jats will take good care of his camels. He has entrusted all 900 of his Kharai camels to different Fakirani Jat households scattered in different villages around Bhanadi, Kutch. He believes that his camel breeding occupation is stable and remunerative only because of the hard work, goodwill and benevolence of the Fakirani Jats who take care of his camels. Even when there is no market for camel milk, the Fakirani Jats continue to look after his herds. There is faith, mutual trust and cooperation between the two communities. According to Paancha Bhai, there has never been an instance in which a Fakirani Jat has cheated a Rabari camel-owner or meddled with a profit. They use the money they acquire from the sale of camel milk and pay rent to the Rabari camel-owner. This is their simple system and it has been followed religiously for years since it is the word of Savla Pir and all his descendants. Paancha Bhai explains that if he has a son, he will give him some of his camels but ultimately, his son will entrust them to the Fakirani Jats ensuring the continuity of the established system.

The relationship between the Rabaris and Fakirani Jats is defined by the give and take of camels but this relationship does transcend the boundaries of dry professional alliance. Although the link between the two communities is based in the exchange of Kharai camels, it has developed into a warm and congruent connection. During joyous occasions such as marriage and festivals, families from the two communities come together to celebrate. The Fakirani Jat families are invited to join in the festivities by the Rabari families whose camels they look after and vice versa. One occasion for which the two communities come together without fail is the Savla Pir fair that takes place in Gujarat. Rabaris and Fakirani Jats from all across Gujarat celebrate the teachings of Savla Pir and express their gratitude to him for blessing them with Kharai camels.

Meena Ben, the vice president of the Kutch Unthh Uchherak Maaldhaari Sanghatan (KUUMS) reiterates that the two communities associate with one another only because of the Kharai camel and the economy surrounding it. This association is

pivotal to the smooth functioning of the camel milk economy and the lending and borrowing of camels. Had this professional alliance not existed, the Rabaris would either sell their Kharai camels to buyers outside the region or neglect them altogether when camel markets crash and the breeding of cattle becomes a more viable option.



Image 18: A camel with its legs tied to prevent it from wandering too far

Source: Discover India Program

The Tail – Concluding Remarks



Image 19: Ahmad Ahmedbhai Jat with his father's camels

Source: Discover India Program

5.1 Conclusion

With these many observations, it is evident that we gained a comprehensive, and detailed understanding on the several aspects of the camel breeding profession, but is necessary to acknowledge the limitations of our research, and mention the challenges we faced, through the process of our on-field research.

The district of Kutch is a highly guarded and sensitive area because it shares borders with neighbouring countries. National security is given utmost importance there, and standard rules and procedures of entry and exit have to be adhered to.

Due to mistakes of our own, and incomplete information from our point of contact in Kutch, we were unaware of the extensive paperwork and host of permissions that would be required, to be granted entry into notified areas in the district. Upon arrival in a community centre near Narayan Sarovar where we were staying, we were questioned on why we did not have the paperwork, and made aware of how filming in such a sensitive area was prohibited unless the necessary permission was obtained.

What ensued was a tumultuous journey to Bhuj and from there to various other talukas in order to get written permission from each governing police post, and back, to finally get the District Magistrate's signature on a sheet of paper that decided the fate of this project. This resulted in the loss of a day, even though the learning acquired from this experience was very valuable.

This anecdote is of importance because it made us realise the gravity of researching in such a sensitive area. On many instances, quite a while was spent in showing the Border Security Force our permission letters and explaining the nature of our research.

While all these experiences and conversations with government bodies and bureaucracy definitely added to our reservoirs of experience, it is undeniable that in some cases it resulted in the loss of time.

Secondly, the camels were always on the move in search of pasture. Their breeders travelled with them. This proved to be another limitation for us, in terms of the number of breeders we were able to survey, and their availability. Many a times, plans were made spontaneously, on the basis of a phone call saying breeders are in our vicinity. Due to the breeders being in a state of constant movement with their camels, we couldn't follow a structured itinerary to the T. Much of our plans were made on the spot, and we had to be prepared for any sudden changes.

This limitation however enabled us to get a much better insight on the lives of the breeders, and their relationship with their camels. Walking up and down hills for hours, sipping on camel-milk tea and conversing with them about the importance this profession holds for them helped us in a manner that a well thought out, structured day possibly wouldn't have.

The final barrier to our research was that of language. Since our team had two members who knew Gujarati, and many who understood it, and the breeders knew Hindi as well, the interviews were conducted properly, and questionnaire responses collected accurately. However, a few things inadvertently got lost in translation. The ease of conversing in a common language that flows smoothly off the tongue is always better than translating and communicating in a language that comes second to your native one.

We would like to believe that we took all these limitations into our stride and spent a good 8 days on field. We met all our requirements and in some areas, even exceeded our expectations. We entered the field with five concrete objectives and returned having collected data on all of them.

One of the first questions we would ask respondents would be about the history of Kharai camel breeding. They would explain how the profession is almost like a family asset and has been passed down from generation to generation. Our interviews would end by asking if they were happy and satisfied with their profession. Some would answer warmly and say that their camels are all they have while some would say that they will shift occupations the minute they get the chance. All in all, we have a clearer picture of the Kharai camel breeding profession, what it has been and what it is now.

We planned to research the economy surrounding the Kharai camels and assess the participation of breeders in it. After conducting interviews with Dr Seth Singh, a specialist in the field and Mr. Pankaj Joshi, a representative of Sahjeevan, we gathered information on the current state of the Kharai camel breeding economy. We now know the prices of camel milk and the various costs involved in the profession. This was an important finding since analysing the condition of the breeders and assessing their standard of living depended on it. We understood that the profession is not a stable one but a constantly fluctuating one and there are countless hardships involved in it.

We may have not been able to look at the professional, socio-cultural and religious identities in unison but we learned that they are inextricably linked. The Rabari in Kutch is supposed to be a Kharai camel breeder. He is known as a Kharai camel breeder and a worshipper of Savla Pir. For a Fakirani Jat, roaming with his Kharai camel herds in the vast grasslands of Kutch and being a *fakir* in the truest sense is the only way to be.

The data we received from the forest officials of the Jakhau Forest Department was extremely valuable. It was like hitting one bird with two stones because it fulfilled two of our objectives simultaneously. We learned about the Kharai camel's connection to the environment of the region as well as the government's interference in the Kharai camel breeding profession.

It is safe to say that we fulfilled all our objectives even though we were not able to research each and every aspect of them in detail. Our trip yielded in substantial research which can serve as literature for any future studies on this topic.

Researchers who refer to our report will have access to the basic economic, historic and social information about the profession. They will not have to build a foundation for their own research since our primary material will have built it for them. They will be able to further investigate the profession without having to focus on the fundamental facts and figures that we have tried to cover in this report.

Moreover, our research is an indication that there is lots more to know about The Rabari and Fakirani Jat breeders of the Kharai camel. Research must be conducted in places such as Kutch that are rich in their cultural heritage. Research must be conducted in places

inhabited by people whose simple day-to-day lives which are rooted in tradition, are a source of great knowledge and learning.

With this project, we hope we've succeeded in our endeavour of gathering, and publishing relevant information about Kharai Camels, and the process of breeding them. We thoroughly cherished every moment of our pursuit. Interacting with the breeders, and witnessing the splendid glory of the camels, in such close quarters, was a truly humbling experience, and in conclusion, we can only hope that we've done adequate justice to it, through this detailed report.

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PRIMARY SOURCES

NAME	PLACE	DESIGNATION
Mr. Mahendra Bhanani	Bhuj	On-Field Expert, Sahjeevan
Mr. Pankaj Joshi	Bhuj	Managing Director, Sahjeevan
Dr. Seth Singh	Bhuj	Specialist in the Field, Collaborator
J.P Dangar	Mohadi	Forest Ranger
H.P Verala	Mohadi	Forest Ranger
Aga Khan Savlani	Dragavandh (Lakhpat)	Spiritual Leader of the Maaldharis
Noor Mohammed Mubarak	Mohadi	Fakirani Jat Breeder
Paancha Devidas Rabari	Bhanadi (Abdasa)	Owner of the Largest Kharai Camel herd, Camels rented out to Fakirani Jats
Meena Ben	Jhadwa (Lakhpat)	Vice President KUUMS, Rabari Community Member

Naseebi Bai	Dragavandh (Lakhpatt)	Wife of Fakirani Breeder, On-Field Guide
Sher Mohammed	Dragavandh (Lakhpatt)	Senior Fakirani Breeder

APPENDIX

I. Transcript of Interviews

1) **Interviewee:** Dr. Pankaj Joshi, Sahajeevan head

Interviewer(s): Nishant Pillai, Shreshth Bansal, Leonardo Varghese, Anishaa Gupta

Location: Bhuj

Pankaj Joshi: Sahajeevan's role is to figure out how to strike a balance between the economy and livelihood of the breeders, and the biodiversity and ecosystem, while understanding the lifestyle of these breeders. We've to keep the Forest Department in mind as well. We cannot excessively talk about one side and completely ignore the other. It is essential to strike a balance between the two. So we have to come up with a strategy that will create a win-win situation. And this is a big challenge. Creating a strategy for one side is very easy but in this case we have to make each party see the other's perspective. We have to have discussions with one and bring up the problems with the other. For instance, convincing the forest department to keep the camels and the breeders in mind while they're working on their plantations. *Maaldharis* have a lot of traditional knowledge so we have to make adequate use of that too. We have to keep the Forest Department's demands on the table as well. So that's what we're working on right now. Mahendra must have told you how we've identified about 10-12 clusters over the landscape of Kutch. They have a grazing system that extends to anywhere between 6 to 28 sq. km. Both, Kharai and Kutchi Camels are a part of these clusters. Kharai is the only breed which is dependent on mangroves. It depends on mangroves 60-70% and 30-40% on other terrestrial vegetation. Their entire life cycle depends on saline tolerant vegetation. So we have to maintain the dual ecosystem in order to help preserve the Kharai Camel breed. So if we don't preserve the associated plant species, the Kharai camels will for sure have a problem in the future.

Interviewer: Is Sahajeevan the scientific voice in the relationship between The breeders, who have a more traditional or mythological understanding of what is happening, and the government, who is more concerned about the mangrove plantations and the security at the borders?

Pankaj Joshi: Evidence, plus, there are a lot literature available, if you see online. GEC, Gujarat Ecology Commission, they published one atlas, mangrove atlas, for the entire Gujarat state. In this they have identified the potential area for mangrove restoration. So if you do some micro level exercise for those potential identifies areas, all the Kharai breed is going there. Restoration Potential Site is the correct technical ecological term. Now the problem is there are two departments here: Kutch District Collector, or the Revenue Department and the Forest Department. So there should be dialogue between the two, and that is what is not happening. There is a lot of gap between the departments while implementing these strategies, but there still is potential in Kutch because there are people who listen. I met this DFO (Deputy Conservator of Forests) about 2 years ago and I was discussing this issue that had come up of some rift between the guards and the *Maaldhaaris*. The guards had said that they're not letting them graze on this route because there are some plantations on the way and a third party is coming for inspection. In a way, they're also not wrong because if my boss comes and asks me, "We did plantations on this route. Where are they?", so then that will go on my charge sheet. So he said that they don't have any problem with the camel grazing there as long as it happens once the inspection is done and recorded. He was right because otherwise he would've ended up losing his job. So when we shared this with the DFO, he immediately called the guard directly and asked him why he is not allowing grazing in that area. So he said that it'll help if they could try and create like a separate route specifically for the camels from where they could walk and get to the mangroves, without affecting the plantations. So some negotiations took place for 1-2 days and then they decided to do it and they made a good route for the camels. But that was then. Now, the problem is that the tension between the *Maaldhaaris* and the department doesn't get highlighted much. So it is our responsibility to give it a proper platform. So we've published a lot of booklets with background and basic information. And we've published them in Gujarati so that the Forest Department and the administrator can understand what we're trying to say. They have basic information and also some site specific information, for instance, we have 13 clusters, so every cluster has a short report stating the issues and challenges, who the stakeholders are, and what our plan of action is or should be. So we've shared this information with every department. That is helping because now if a new industry has to come up, they have proper knowledge about the issues. These industries that you can see right now, came up right after the earthquake. There are no new recent ones coming up. There are 2-3 jetty proposals between Lakhpat and Abdasa but they're waiting for the economic clearance from the ministry of Environment and Forest right now. But there are no new developments coming

up, as such. So our challenge right now is to negotiate with what is happening or has happened already. These two students from Kyoto University in Japan had come here for research. They came for 3 years for about 5-6 months at a time and did good research. They worked with TATA mangrove vs Kharai Camel *Maaldhaari*, in the Mudhra block. They conducted situational analysis, and looked into all the mythology and the existing literature on what the government has said, what organizations like Sahajeevan have said about traditional methods. Here, there is a third person who is looking at us and at both the situations, and what is being suggested, academically, as a researcher. So they tried doing that very well, at least for Mudhra block, for making the whole plan. But when we send this information to the concerned officers, they're not ready to listen, insisting that they already have a system, or plan, that the Gujarat Ecology Commission or the Department has made, and those are the schemes they are supposed to follow; that's what they've already been given the money for, and they can't do anything outside of this prescribed method. So, after this, we felt that this is not an issue just at the Taluka or block level, this is also an issue at the State level. So we began working at that level; we involved the State University, and sent our report to the Gujarat Ecology Commission. But, still we believe that as long as the people's or the breeder's voices don't enter the planning process, whatever plans you have, will only look good on paper; all it will amount to being is a colorful publication. If you access the Gujarat Ecology Commission's website, you'll find really long reports online, they all publish very colorful reports. But if you try to look at the implication, or their recommendations; this should be done, or that should be done, this should be that way or that should be that way, there's no clarity as to who will finally get around to doing these things, on ground. They're not ready to face the problems. Shouldn't they come talk to the people? It's only then that they'll realize what the actual problems are. There's no point sitting in an Air Conditioned office and making recommendations which do not relate to what the actual situation is. The people making these reports are ecologists, but there's no way of knowing if these recommendations are viable, or economic, or sustainable for the ecology, even. But, recently, the way the Camel Breeding Association has been made, and when these institutions are established, they have a very powerful control when the elections are around the corner. Compared to the other associations that Sahajeevan has built, for instance, for the Banni (buffaloes) breeders, the Camel Breeders Association is not very mature, because the exposure of these breeders is a little restricted. This is not to say that they're illiterate or that they do not understand things. It is just that they do not necessarily understand the gravity of their situation, and we are now prioritizing these issues; be it with respect to their livelihood,

the economic viability, or what the challenges concerned with preserving their traditional grazing routes are. Decisions about what actions need to be taken immediately have been taken on the basis of what we have observed over the past three or four years. Economically, the business livelihood of the camels is perhaps not economically viable, so Sahajeevan has focused on this. And we've begun talking about camel milk, and camel wool. And for the first time, there is a dairy being established for camel milk, with the co-operation of GCOMM. It wasn't considered to be a food item before, but it has been recognized as a food item, in these past three years. AMUL is also ready to market this milk, now. So, before or after Deepavali (Diwali), after making chocolates, and marketing it in a couple of places in the state, it will be launched all over the country. Even now, it is being prepared to a certain degree, and the milk began being purchased at ₹ 50/liter. So now, the momentum is picking up. For the next one or two years, if we focus on the economic aspects, and work with them, and the dairy gets established, then we can focus on the other issues like their grazing and natural resources, and do more work in those areas. In two or three places, we have started piloting, we are working to preserve their traditional grazing system, by uprooting species like *Zulifora*, not in the grove regions, but on small terrestrial areas. We have achieved good success in this endeavor. We introduced new tree species which the camels prefer in these areas, according to a checklist of 10 -12 species which was based off the traditional knowledge of the breeders. We have initiated work in the areas of both conservation and restoration of natural resources, but it could take us another year to focus and work on a full-fledged massive level.

Interviewer: Sir, from what I have gathered, I feel that you have many insights about the camels, and you're presenting the community's voice very clearly before the government. However, do you, or can you work in collaboration with the government, or the GEC? You did claim that they sit in the offices and publish their reports, and you conduct on field research before publishing your reports, but since you are both publishing scientific research, is there a connect between them? Because there is an abundance of literature based on the traditional knowledge of the breeders, and you've done a lot of work for them in the past three years, but is there a need, a scientific need, to bring a certain connect between you, the breeders, and the government?

Pankaj Joshi: That is correct, we have also done this, three years ago with 'RAMBLE', Research and Monitoring in Banni (buffaloes) Landscape where we focused Banni

(buffaloes) grasslands and Banni (buffaloes) breeders. See, you need to understand that Sahajeevan's strength is that we are a social mobilization organization, and we mean to work by taking the social background and culture into consideration, and by understanding and balancing the nature and livelihood. We are not a pure scientific organization. So, what we did with 'RAMBLE' was that we started a small research initiative and invited a host of institutions such as ATREE (Ashoka Trust for Research in Ecology and the Environment), which is a Bangalore based organization, and NCBS (National Centre for Biological Science), which is also Bangalore based, and a few academic universities, like Ambedkar University, JNU (Jawaharlal Nehru University), and our local Kutch University, and frankly shared the fact that even though we have increased, and conducted a lot of research, referred to enough Peer Review literature, there is not enough research happening according to what the needs of the breeders are. Very frankly, we shared this information. This also included my publication, as I worked in the field of Banni buffaloes, 10 -12 Peer Reviews were my publications, I had also given many recommendations, but the implementation of the same is not happening, because it is not viable. We haven't done anything in partnership with the people! This research, as scientists, we have made some or the other recommendations, with the available literature or whatever our up to date knowledge was, but the implication hasn't happened. So, we shared this very frankly. Then, what happened there was, and it has been five years since, ATREE agreed, NCBS agreed, and the Academic Universities also agreed, and then, the breeders, there is an association there, the Banni (buffaloes) Breeders Association, they are also a part of this network, and Sahajeevan is also a part of this network. So, 'RAMBLE' has been working as a Research Initiative in the field of Banni (buffaloes) for the past five years. We didn't actually do research there, we only framed the agenda, along with the people, and along with the scientific community. We made both of them sit together, and provided them with the platform, and all the required facilities, not just for research purposes, but also basic necessary facilities like food, accommodation and logistical support. We established a small research station, with 5-6 rooms, and trained the local youth to assist the researchers. You please visit bannigrassland.org, which is RAMBLE's website and on there, we've finalized what our long term research agenda should be, what our short term research agenda should be, for the researchers. So, for same direction, we have begun to think of something like this for KUMS, that a research institute only for camel breeders can exist, the way 'RAMBLE' is working in the Banni grasslands, with complete focus, and in that way, research agenda, we know now, and it has been 3-4 years since we began working this way with the camel breeders. So, at a certain level, we know that

the way the camel breeders' argument is that when they take the camels out to graze, water from the high tide percolates in their footprints, seeds fall in here, and there are chances that growth can happen quickly, and mangroves can establish quickly, good saplings can be produced. And good manure also falls there, because when they graze there, their dung falls there, and we get good manure. So there are a lot of chances that wherever mangrove grazing is happening, it can establish well there, the potentiality is good, for mangrove restoration. So, this is the research question now, and for this we'll have to make a long term research agenda, we'll have to make a short term research agenda and a medium term research agenda. With whom? With the researchers. Because some of the other research is happening, but the research either supports the traditional knowledge or either derides it. We aren't ones to be biased, the research should be true. Whatever research is undertaken, that either establishes whatever the breeder's thoughts are or either derides it. But there should be some research that would aid the implication plan or the action plan or some working plan, in the future. There should be some agenda that both the forest department and the breeders understand, and it is only if the researchers understand this that they can make decisions, and present their recommendations. There are chances of something like this happening now, and we have started something, and decided that we can have such a research center in Lakhpat, in the same direction as that of 'RAMBLE'. There are a lot of such agendas. For now, we'll work with camel breeders. As far as our initiative with RAMBLE goes, I'm happy to say that two PhDs have happened, since the past five years, which have been done by focusing on our agenda. Only the fellowship had been given by us, we offered six fellowships, in which there were Masters Students, who had come for their Masters Dissertation, and they did some work there. And whatever work is happening now, with 'RAMBLE', we are already monitoring around 60 plots, and we've established a long term monitoring system for 'RAMBLE'. So, whatever data is being generated now, we turn them into management plans in the future, be it a participatory action plan, or a participatory action plan, all this data is being used from the background information. So there is now a direct implication of the research. Research is not being limited to it being on paper. So, researchers like you are very happy, seeing that their research is going into direct implication, into policy intervention, or dialogue; the research is being quoted. So, they are very happy, because their research is both participatory and action oriented. So there's a similar chance that here also, we'll establish all that, but, the way, economically, there was a system before, we want to do some work there, so, to a level we tried something, and we have been successful. Now the conversation about camel wool has also begun. The organization called 'Khamir Crafts' has started keeping products in the

market. So, we've begun some work with camel wool also. And the third thing, which is the most important, which is their traditional grazing system or routes, we need to see how we can protect them. Because the milk collection center that already exists, or the milk chilling center that is going to be established, with GCMM, and AMUL, that if only become sustainable if the traditional routes are conserved. Whatever center they're proposing, it will work efficiently only as long their traditional grazing routes are undisturbed. So, for the long term sustainability of this system, which is the economic system, where the chain is being disturbed, the natural resource needs to be protected in order to protect this as well, and this is very important. The people are understanding this, and AMUL is also understanding this. We have started a department with AMUL, and we have begun talking to the department, and we will have to recognize their traditional systems. So, we will talk about this, and after that we will talk about mangroves. We have already started talking about the traditional ecosystem. Because now with the mangroves, it is not only the Forest Department, there is also the Border Security Force who are stakeholders, and there are big industries, which are established, they are also stakeholders. Kandla port, which is the government's port, they are also stakeholders. The salt making industry which are on the route are also stakeholders. So there are a lot of stakeholders with whom we've to engage in dialogue, site specific dialogues. It is not as though we'll be making generalized conversation, because in the 4 blocks where we're talking about camels and mangroves, these are very site specific issues, so we've to go there and address each one of them. So, for the next 2 or 3 years, protecting the natural resource would be the most important priority for Sahajeevan and the Camel Breeding Association.

Interviewer: Sir, this is very important to us, because, yesterday, as we had conducted the Focus Group Discussion, with the Forest Officials and the Breeders, and there was clear difference in their opinions; the Forest Officials were on the side of the Mangroves and the Breeders were on the side of the camels. The Forest Officials said that, for them, the Mangroves come first. The argument made by the Forest Officials is that the camels consume the newly planted mangrove shrubs, and reduce the mangrove cover, and the breeders insist that 70 - 80% of the consumption is on land growth. There is an additional claim that their eating the mangroves also leads to the betterment of their dung which can be used a fertilizer. So, as an audience, we're taking all this at face value, and both these arguments seem valid. So, I would like to ask you how Sahajeevan, beyond publishing reports, wants to work, or envisions working with the Forest Department, to find a common point, where mangroves

become equally important for the breeders, and camels become equally important for the Forest Department?

Pankaj Joshi: So, did you speak to breeders, asking them if they wanted the mangroves? Perhaps they would be able to answer this question better, about how they're viewing this. For them, this is their livelihood, if the mangroves aren't saved, their breeds won't be saved, so it is a big threat for them. So, probably, you should've asked this question there. I can very well answer the question, because of my experience, about how Sahajeevan treats this, but the breeders would be more reliable, they can address it. However, on behalf of Sahajeevan, I can tell you how we're looking at this. We have tried to identify certain zones or a region. Zone means, if a mangrove area is about 50 sq.km, so which are the zones not disturbed for the next five or ten years, we let them do restoration work there, we have already identified the potential restoration sites, so do only restoration there, it will take same time, 10 – 15 to 20 years to do the restoration work of the mangroves in that area, and we still have certain areas left where good mangroves are there, for grazing. So, the point here is that, whatever the Participatory Action Plan we've thought out, with the people, so we are also going to the FRA, the Forest Rights Act, 2006, which we claimed for Banni (buffaloes), so, we are going for the Community Forest Act there, CFA, not individual act. Under CFR, we are going to make sure that the action plan that we propose there, isn't only for livelihood, or to save the camels, we are also going to have some plan for the restoration of mangroves, participatory restoration of mangroves, with the Forest Department, or any stakeholders. So, that is there, at the back of our minds, that we aren't only going to conserve the traditional grazing routes, as, going forward, we have to work for the restoration, and we will have to provide a 10-15 year plan, because the government believes that "a scientific plan" is what is needed, and we now know the terminology that we should be using. Because, if we use the language of the people, to explain the traditional grazing route, they are not going to recognize it, you will have to establish it with science and scientific based database, which will support you to prepare your participatory action plan. And then, if you present it, for policy intervention, or the FRA claiming process, then they will recognize it, accepting that you have some scientific database, from publications also, and now, you have a plan. And then we can take it towards implementation. But, this will have to be made with both the involved parties, with the Department, and the breeders. And if we do it this way, there won't be any problems.

Interviewer: So, yesterday, there was just this small example where, they had this small discussion, and it in the beginning, and throughout the discussion, it got slightly heated, because the forest officials very clearly said that their equation with them (the breeders) isn't very good. Sir, do you think that organizing a forum along with publishing meetings, where they all come, meet and discuss these issues would help?

Pankaj Joshi: Now these meetings, they depend on individual to individual, the way I presented the case study of the DFO, so, he's a good, as an individual, he's a nice person. So he heard me out. If I talk of another officer, he is not amongst one who would entertain us, he is the way people from departments usually are. But, if you speak of FRA, legality, if you speak on legal terms, then they have to hear you, as it includes the peoples' right to be heard. So, if there are people who aren't recognizing the breeders' traditional knowledge, they will have to hear you if you speak with legal terms. What we can achieve by talking, we have to talk there, and with these people, if you have to take the legal route, then you have to do that as well. So we have to keep a lot of option open. We are undertaking a journey, or undergoing a process, with the camels, I mean. With the Banni (buffaloes), a lot of this is now cleared, we went through the legal process, the action plan that we had made with the researchers is also being implemented, and the grasslands are being restored, now. So, it took us 2-3 years to do this, and we've now learnt that we must handle this with care. If we rush into this, keeping (only) the interests of the breeders in mind, it might endanger the system that has been established over these many years. So, we are now thinking about that, about which strategy to apply where, as we go forward, and bring about the restoration of the natural resource. Now, today, it is very difficult for me to talk only about one strategy. Like I already mentioned, site-specific, we are treating this very sensitively, with no rush that will disturb the system there. So, we are going very, very slowly, after understanding everything, we will engage in a dialogue with them.

Interviewer: Sir, in connection with the milk, and the economics of camel milk, you said there have been process where even AMUL has entered the picture, so in connection with that part where you said that the government only listens to scientifically backed information, so, in our interaction with the breeders, there have been enough statements that Kharai Camel milk has the ability to cure diabetes and cancer, even. So, when this information is pulled from the breeders' end, and represented to the government or any industry, or AMUL, per se,

so, how does that process happen, where you, or how you do it, as it needs to be grounded in scientific research?

Pankaj Joshi: So, in the case of camel milk, people have always known this. And certain communities which started camel milk intake, for diabetes, they knew. So, for people, there was some idea about the milk's uses. So we started searching, and a lot of references are available on camel milk, not from our country, but from other countries. So, when we established a system, we slowly began mobilizing the people, started speaking to people, began awareness, and in these two years, we took this conversation so far that we took the *Kheer* and ice cream made out of camel milk all the way to the Vidhan Sabha, in Gandhinagar. And once this presented there, at the state level, then the conversation went ahead. Up until then, small scale initiatives were being undertaken, here and there, but when the project reached Gandhinagar, or the Chief Minister, the point that Camel Milk can also be treated as a food item, and that it has medicinal properties, and mainly, that it can economically support the breeders and save the camel, because, back then, when the conversation began, the population of the camels was below 10,000. When the population of a breed is below 10,000, it is recognized as a 'threatened' breed, and when it reached that level, people realized that they will have to talk about the economics, as it would save the camels, and the breeders, also. Then, we introduced camel milk into the process, saying that if you begin investing in this, you would procure some good results after two or three years. And now, breeders have begun keeping Kharai Camels again. As someone was saying, the one who were leaving the profession are now returning to it, upon hearing about what is being done with camel milk. Or else, breeders are now purchasing more Kharai Camels than before. But, this will happen now, for sure.

Interviewer: We had come with a notion that that camel population is declining, and it is not viable for the breeders, as it is getting worse, but we are very happy to hear otherwise. On our first day here, we met a specialist who told us that it is actually the opposite. We spoke to many of the breeders, and they said that, especially the Rabari, who hasn't been rearing camels for a long time, he said that the day it becomes economically viable, he would restart, and a lot of them are saying that it is a lot better now. So, we would like to sort of congratulate Sahajeevan on that, because we know you played a big part in it, and I think we'll be one of the first Reports to actually publish otherwise, because, whatever we had read

until now said that it is rapidly declining and we never knew about this AMUL aspect, so we are really very happy to hear that.

Pankaj Joshi: Thank you for your congratulations, but, this is completely a team work. Right now, like Mahendra (a colleague), there are about five or six people, who are working behind this, on cluster administration, and people like us, who are ecologists, who do not perhaps understand that language, so, even we, around two or three years back, I won't give you wrong information, around 2-3 years back, I realized that there can be such a system, and we must listen to what the people are saying, as well. But we have been taught like this, if we look at the mainstream, as ecologists, we have been taught that livestock will completely destroy the forest areas if they enter it, they'll destroy your wildlife and your vegetation. So, that is the mainstream, and that is what even I had studied. But when I started talking to the people, I felt that there was something wrong with the system. I had even asked one breeder, about the fact that he enters the mangroves and completely destroys them, and that is also what has been taught to us. And you're insisting that you're not doing anything. So he alluded to how we hire a gardener tend to our gardens, to beautify them and how we prune the garden to prevent it from overgrowing. He said that his livestock are gardeners created by God, for this very purpose, to make your vegetation flourish. If the camel doesn't eat the mangrove, it won't grow, alright? When I read this, I saw that the mangroves in the regions where the camels graze, are thick and tall, and wherever the mangroves have no relation with the breeders, those mangroves are still stunted. All these agendas are what we've to keep in front of the researchers, insisting that our research has established something for the long term, looking at the grazing versus non grazing area, and then you establish something. If we say something, then nobody listens, so it's only if a third party comes forth and presents it that it will be revealed. But, even now, we have a lot of background information about what is the research requires for sustainability of this livelihood, as well as that of camel breeders. So, all these things are there, and they will be released, in the future, in the next two or three years.

Interviewer: Landing on the specifics of the Camel Association, what changes did the institution bring about, if any?

Pankaj Joshi: This is not only about this Camel Association, but, until people don't do something together, in unison, then the voice of the people will go unheard; this is something

that needs to be in there. Whatever you wish to say, if only 1-2 or 3 individuals speak, there will be political lacking, even if you're right, or whatever it is. But when an Association is made, there are around 1000 – 2000 people coming together and talking, then the World Bank is also looking at it, the World Bank is also concerned with this. So, to mobilize people, and to provide a platform for them to get on their own feet and make their stand, this *is* what Sahajeevan's work is, and Sahajeevan recognizes that working for the local people, and working on the behalf of the breeders, or other groups, it is never us going ahead and speaking, they will always come first, and we are backing them. Sahajeevan will always be on the background, and people keeping their voice in the front, and Sahajeevan can probably help in how they do this. What sort of campaigns are to be done, what platforms they should speak on, are the areas where Sahajeevan supports them. But people will always be at the forefront for us; we can arrange discussions according to their needs, but they are the ones who will have to speak. We train them, provide them with exposure, provide individual counseling identify youth who can speak well, and all this is Sahajeevan's work. But as long as the Association isn't made, things like milk, FRA, natural resources, they may not get highlighted. Milk, or Kharai Breed got highlighted because of the association. If the government wants to talk, it negotiates with the Camel Breeder Association, and they receive a letter, asking them to come talk. For the first time in history, a representative of the Banni Breeder association is there in the committee. So, as long as the Association isn't instituted, they may not be getting as much benefit as they should be getting. Hence, Sahajeevan, and I've been here for the past 5 or 6 years, perhaps, but what one of the pillars of Sahajeevan is that of mobilizing the people, and speaking for their livelihood, and ecosystem. So, the first pillar is that of working with the people, and giving their voice a platform and deciding where to take them ahead. Now, with the Banni Breeder Association, every two or three years, we formed some agenda, and the same way, with the camel breeders, with the Breeder Association, we are firming some agenda, alright? The way we worked with milk market, the camel, so for the next two years, we will talk about the natural resources and its conservation. So, whatever program is shaped now, it will happen according to the agenda. So, all this is Sahajeevan's role, mobilizing the people, giving them the right path, with transparency, and making them work.

2) Interviewee: Dr. Seth Singh, Animal Specialist

Interviewer: Anishaa Gupta

Location: Bhuj

Interviewer: What about the camels interested you enough to get you to start working with them, in order to get them recognition?

Dr. Seth Singh: When Sahajeevan started working, they worked for Kutchi camels which were already a recognized. If any breed's population goes below 10,000 they are considered as a threatened category which is close to extinction. Government launches a special scheme for breeds under the threatened category, there is special allocation. Sahajeevan already had a background in this field as they had gotten Banni Buffaloes registered. Banni Buffaloes was also the first breed whose registration happened via a community. Community participation was just as much as scientific studies that had been done. The application for the registration of this breed was a combination of the scientific studies and community. Sahajeevan had a good background of mobilizing communities. The department spent most of the part of the allocation of the threatened category making a farm for Kutchi camels, which is nearby and the rest of the money was spent in understanding, mobilizing, uniting the community to make an association to figure out the issues faced by them, and to the reason behind the fall in camel population. Sahajeevan was involved in this. There were a lot of problems like health issues, socio-economic problems like the decrease in mobilization which led to decrease in the population of camels, there wasn't a lot of income from these camels, which also led to a fall in the number of breeders, the nomadic life scared away the new, young generation. When Sahajeevan got this project they started interacting with the community which is when they heard from the community about the new species of camels which are separate from Kutchi camels and can swim in the sea and eats mangroves, which are found in coastal areas. In the local language Kharai camels were known as Kharia camels as the sea water is Khara (salty) and Kutchi camels were known as Meethi, which means the one who stays on land. When the technical team, staff of Sahajeevan heard about this they took a step at getting this breed registered just as they got Banni buffaloes registered. Technically Kharai camels is a separate breed from Kutchi because there is a completely different ecosystem for grazing. When a social study was done, it was discovered that their social history is very old and after tracing their history they heard about Savla Pir and his sixteenth generation, Aga Khan, who confidently said that no matter what people say, we know that our camels are different from Kutchi camels.

As Sahajeevan had already gotten the Banni Buffaloes registered through the community, agricultural university, it was clear to them that these camels should also get registered and attain recognition. They are a unique breed. Every animal can swim if they are in an adverse situation, even cows, which are sacred of getting in water can swim in an emergency. But Kharai are important and unique because they swim to get to their food, mangroves, and come back to drink water and keep going back and forth throughout the year. This is why the breed registration process started. Meanwhile the social workers like Mr. Mahendra Bhai and the staff of Sahajeevan NGO made an association. With the help of this association the technical staff and the doctors of this field worked to get the breed recognized and started the process of registration.

Interviewer: You got to know about both Banni buffaloes and Kharai camels through the communities?

Mahendra Bhanani: Yes, Banni Pashu Uchherak Maldhari Sangathan (BPUMS) was made for Banni buffaloes and Kachchh Unt Uchherak Maldhari Sangathan (KUUMS) was made. That's how along with the associations we got Banni buffaloes registered and got Kharai camels recognized through KUUMS.

Dr. Seth Singh: If you have to get any breed registered then according to FAO there are two definitions of the term 'Breed'. The first is the technical one and can be determined by the difference in animals and population from the other physically and it can be identified just by looking at them. The second definition according to which you can get a breed registered is, if there isn't a lot of physical difference but there is a cultural difference of the culture of the breeder of the breed and if the ecosystem of the breed is also unique, even then you can get the breed registered. There is a proper technical process in which both the aspects as necessary, the social staff checks the social background while the Veterinary staff covers the technical aspect. Let me tell you in brief, first we decide if the breed is different or not according to the visual aspects. We already had the monograph of the local Kutchi camels. Our approach was to directly ask the breeders about the physical difference. As compared to the Kutchi camels the head of Kharai camels is bigger, their thickness is more, the overall size is smaller, the size of the chest pad is smaller, the hooves are smaller, the thickness of legs is lesser, the ear is inward bending and has more hair, the quality of the wool is better and it's longer, probably because they swim in salty sea water. The dermatitis problems faced by the Kharai camels are lower than that faced by the Kutchi camels, because the sea water

helps them to fight skin diseases. These are the technical differences. When we ask the breeders about these differences they say the same thing that we later observe. We might even forget about these differences after our project, but the breeders don't. There are stories when the breeder was able to recognize his camel even if they were lost 20 years ago. It's very easy for them to differentiate a Kutchi camel from Kharai camel. We record the physical parameters such as the coat colour, type of hair, colour of wool, biometry such as the area between both the eyes, length of the entire body, face, ear, neck, tail, the height of the camel, girth of chest. All this helps to differentiate the two breeds. Then there are production parameters such as production of milk. The production of milk is lower than the Kutchi camels but the fat is more in comparison as they eat more mangroves. Then comes the reproduction parameters which cannot be recorded on field, so we interview 50-100 nice breeders about the age at which the camel first gives birth.

Interviewer: As you said, earlier the camels were endangered because rearing them wasn't economically beneficial to the breeders. But are there any issues related to just the camels, in particular, because of which their numbers were decreasing? Like, we read somewhere that the number of mangroves in the area decreased, how does that affect them?

Dr. Seth Singh: Yes, you're right. The thing is, why the breeders are leaving this profession? The main reason for that is a man can't make do without money. The breeders' life is one full of struggle. In addition to that, there are a number of other problems that occur. Firstly, the camels' health issues. In that, there's this disease called Trypanosomiasis which is basically a blood protozoan disease. Like, in humans, a specific mosquito's bite causes malaria. Similarly, in camels it causes Trypanosomia. We call it *saraa*, the breeders call it *fitoda*. So because of all this as well, earlier, about 10 years ago people claimed their camels die. Secondly, it is not like there wasn't a drug available against this disease. The drug exists but if someone has 40-50 camels and *saraa* strikes even 10-15 of them, the breeders don't have enough money. Their income is less and the drug is also slightly expensive. But now, after the work that Sahajeevan has done, every year the preventive dose for the disease is provided to the camels. The government provides funds according to the camel population in each taluka, and the drug comes from the government department. Also, now, a preventive treatment is also possible for the disease. I won't say its vaccination, but a preventive treatment so the disease doesn't enter the body of the camels, in the first place. There's a drug present in the body which fights it. Another reason for that, which is not very visible in Kharai camels, yes but Kharai camels that are not going into the water and all these issues so

at times, we can observe this there. Or if Kutchi camels and Kharai camels, during the winter season, wherever they are staying together, the skin disease dermatitis can be observed in the camels. The thing with that disease is it'll spread completely in all the animals and the camel is under distress. Because of this distress, the production also decreases, growth decreases and so does the milk production. So these are the issues. But for both of these diseases, the government is now directly helping the breeders. Earlier, they were meeting the breeders and arranging the camps through Sahajeevan, but now the government meets with the camel breeders directly and takes care of the preventive treatment, every year. Also, now the breeders have more money so even if they miss a camp and their camels get a disease or two, they can always call the veterinary services and get the required treatment done. The third aspect, I will leave up to Mahendra *bhai* because that's related to the camels' grazing etc., like you mentioned, the issue of the mangroves. It's not that the mangroves are just decreasing. There's a lot of reasons for the dwindling number of mangroves. Wherever there's a lot of human intervention, or industrialisation. There's security forces' issues in the border areas for Kutch, they live with the breeders. In some places, there's industrialisation. In places where there's a lot of salt industries, the flow of the water is less because of which the mangroves are getting damaged. Every place, every *taluka* has its own set of issues because of which they're unable to even approach the mangroves. The decreasing number is undoubtedly an issue, but even in places where there are mangroves, the inability of the breeders and their herds to reach there is a bigger issue. The camels' entire ecosystem is breaking because of that. If you take all of these issues together, where does one find his way? No money, no place to graze the camels, there's the health issues as well. If you combine everything, one will think he should consider changing his profession, or selling away his camels so the survival is easier, instead of wasting so much time and energy on all of this. As far as the other issues are concerned, like the mangrove issue, I've spoken to you about health, the economy issue is simple and straightforward and it's also getting solved now. But the ecosystem, because of which the Kharai camel gets its name, that issue is still relevant. Mahendra *bhai* will talk to you about that, or if when you go for your field visit, you'll learn in detail which place has what issue. Wherever there's a border issue or an industrialisation issue or if it's because of other people, okay?

Interviewer: We read somewhere on the internet, that these camels are sometimes used for their milk and sometimes for their meat, using other means. They hunt camels or take them away using illegal means. So, I mean, with respect to this, how relevant is this?

Dr. Seth Singh: See, here, the milk issue, earlier the milk had no economic value. In today's date as well, if you go into a camel herd, they will definitely offer you the milk. That's not too big an issue. And other people, who don't really know about the milk, won't harm the camel just for the milk. As far as the meat is concerned, the breeders here are Hindu Rabaris as well as Muslim Fakirani Jats. There's four divisions under Jat as well, out of which Fakirani Jats keep Kharai camels, since you're especially talking about Kharai is why I'm telling you about this. These people are surely vegetarian. They will never take camel meat for their own use. I mean they don't eat camel meat and according to me they don't eat any kind of meat at all. They don't slaughter the camel for its meat. They are purely vegetarian and they also believe that the camels belong to Maata Medhi, it's their religious belief and they don't even sell the milk of these camels mostly. Talking about camel hunting, I can't say about other places but in the Kutch area at least, here if you lose your way anywhere anytime, nobody will harm you and will treat you like their own, this is my guarantee. Okay? So harming other animals, I mean, these are extremely rare issues here.

Interviewer: Okay. Like you told us about all these problems, what do you, personally think, and are the solutions to these problems? Like you mentioned income also.

Seth Singh: See, according to me at least, the three solutions that I mentioned. I mean...the three issues, more than me, Mahendra Bhai is connected to Sahajeevan and to the breeders. My work with them was limited to technical information. According to me the three issues that I mentioned: The health issue is solved thanks to the department. They keep getting medicines regularly, year after year. Camps are also organised. Other than these two diseases, if the camels face another disease, even for that if you approach the government veterinary services, you are provided treatment which is free of cost, mostly. If need be, the breeders consult other people on their own and find a solution. The second issue, the issue of the economy is also on the verge of getting solved. As soon as they get linked to Amul, this issue will be solved. Here, the milk is collected according to the fat. They've made an exception for camel milk. The camel milk is directly collected. 3 types of fats minimum is the criteria. If the three fats are not present, the dairy doesn't even collect the milk, but there's an exception for the Kharai camel. So the breeders are directly getting INR50 per litre. That is also bound to increase, year after year. So, these two issues are on the verge of getting solved, basically. Other than that, the ecosystem of the camels, which is the mangroves, for that what has been done and what all is necessary, that I feel Mahendra Bhai will be able to tell you in detail.

Interviewer: Yes. Okay, I'm going back to what you said earlier about how the community approached Sahajeevan , and Mahendra Ji and claimed that they're a 100% sure that the Kharai is a separate breed and is different from the Kutchi camel. So, first of all, do you think if there's research on the fact that originally if it was a conscious attempt to get them the separate breed label? That they're naturally a separate breed from the larger camel population or if this was just they're observation that we have a different breed and then they came and told you about it. Or if it was a deliberate attempt?

Dr. Seth Singh: See, if you want, I will not say that you can't make or declare a separate breed. Any person can make/declare a new breed. *unclear* If you have 100 animals, 1000 even, in a farm, if you go for breed registration, there will be a problem. But if they're spread everywhere, and you file for registration then, its easier. For them, the Savla Pir's story, for them, they believe that that's how they know these camels are special and different from the Kutchi . So in the story, Savla Pir is the one who gifted the camels to the Rabaris so he swam across the water. He also instructed them how to maintain the camels. You'll also learn about the Rabari and Jat relationship. So, technically, even if you ask them, at least this is what I believe in, that even if you ask them, they'll definitely tell you where this started from but they won't be able to say that one particular person said the camels could swim so we started this. They will relate this to their belief. But as far as the breed goes, you can encourage inbreeding, which will give new characteristics which will then spread, and create a new breed within 10-15-20-50 years.

Interviewer: Yes, but according to you, they will say this, but in your professional opinion, you think this must have happened?

Dr. Seth Singh: See, in India, for India's livestock population, up until now the registered breeds, they say it's technically 30%. The rest of the livestock population, which means the remaining 70% of the population, that doesn't qualify for any breed as of now. What is the definition of breed? As far as we understand, it means that there is animal population and behind it is a specific community which exclusively maintains that population. The community and the breed coexist in a way that the ecosystem consists of these two. They are the only ones that can best survive in that specific area. And the relationship between the community, the ecosystem and the breeder is such that a means of livelihood is also generated from it, for the breeder. The rest of the 70% population, like I told you, out of that as well new breeds. See, in the last few years 40 new breeds have been registered in India.

Okay? Recently. At a gap of 10, let's say between 5-10 years. There's different breeds everywhere, that's not a thing. But if you take each one and ask who developed it and how it developed, there'll definitely be a story behind it. Where they came from, how did they come and reach here, why these people rear these particular animals, there'll be a reason for that too. As to why they breed and rear this particular animal, in this particular area. It could be its adaptation, there could be social values behind it, there could be religious beliefs, or there could be an economic point of view. In the sense that the breed is best suited in the particular area to generate an economy. The views will differ, the stories will differ, but the community, breed, ecosystem and livelihood, these four things will definitely exist. Okay?

Interviewer: Yes. So, and, Mahendra Ji, like Dr. Seth Singh told us, the community approached you, and they struggled for so long and then the Kharai camels were recognised as a separate breed. Now, since the breed has been recognised, how has the community benefited from it? Other than the major economic benefit. But other than that, how else did the community benefit from the camels being declared as a separate breed? Or what difference, if any, did the recognition make?

Mahendra Bhanani: Like Dr. Seth Singh just told you...

Interviewer: Yes.

Mahendra Bhanani: Earlier the government wasn't aware, but because of the breed which was 7200 at the time. Like Dr. Seth Singh told you about the diseases Khaji and Fitoda, for that government has set aside some funds, so that has started now, slowly. Recently, Sahajeevan has been given a grant of INR 40 Lac to improve the grazing areas of the camels. So, we're using that money for their betterment. And because of all this, awareness has spread. People are more aware and so is the government. A number of national and international NGO's as well as the Central Government, they ask us for proposals to help this cause, time and again. So, things are improving gradually.

Dr. Seth Singh: I mean, basically, how the breed benefits from registration is that the government intervenes directly, keeping the breed in focus, and benefits the breeders. So the breeder also benefits from it. Now these benefits can be of two kinds. First, they're getting recognition from the government that you are the keepers and the saviours of this breed. Second, the work that they've put in, over the years, to save and take care of the breed, they're

finally getting returns for it from the government. So, basically, if you think of it this way, they're happy about this. That because of the registration all of this was possible.

Interviewer: Yes, that's true. And, well, that's it, we're onto the last question. So we spoke about the milk and its advantages and if there's a definite tie up with Amul in the future then the economic value of the milk will only increase. So, is there any plan in action right now? Like we heard that even in Bhuj, whatever milk and available is mixed with other milk because no one will really buy pure camel milk. So, has anything been done outside of the community to help spread awareness about the benefits of the milk? Other than the exchange of milk, or the sale of milk, how else can the breeders earn a livelihood through the camels? Milk and wool: are these the only two ways?

Dr. Seth Singh: See, because of the money being generated through the sale of milk, because of that the price of the camel has been impacted, it has almost doubled right away. This is one, as in, the breeders realise that if they're keeping a camel, it is kind of an asset for them. It has become an asset for them. Earlier, the milk had no importance, so why would the other person buy the camel? Now they know that the milk has medicinal properties, so they're getting money for that as well. So the other person can buy the camel at a higher price as well. So firstly, the economic value of the animal has increased. Now, secondly, the importance of their wool, if you look at it, overall, the wool that is generated from the camel annually, is very less in quantity. But still, even that partly contributes to the income that is generated. For example, there's this NGO called Khamir which is related to Sahajeevan itself.

Interviewer: Hmm, they were at the fair as well.

Dr. Seth Singh: Yes, they were at the fair as well. So even they make products out of the wool mostly and sell them in the market. And mostly, they make the products so brilliantly that...see, how did these people use the wool earlier. The use for the wool was for the milk that they require, for that they used to make a cover for the camel's udder. That's all they used it for. Now, they're getting money for that as well. So, milk, the animal's price, and this thing - all three of them are generating economy for the breeder, okay? And, with the passage of time, as these people (Sahajeevan) keep working, its ecosystem will be set, the issue of the mangrove, the grazing land issues, all of that will be solved, so then that is enough for them. To keep the camel, and, I mean, survive with it in the future. Okay? And there's another thing as well, that, in Kutch, here, up until now I haven't heard of or seen anybody slaughtering the camels. In Rajasthan, I've heard in the news a couple of times and seen it as well, that if a

person doesn't have any income, or no other source, then there's always this one source that they can sell the meat of the animal. That they'll get at least something out of it. So, in that way, camel meat is also available. Animals, people eat every animal's meat. But Rajasthan has a different issue, the state has declared it and so they've stopped the meat production, okay? But yes, now it's like the milk's value is increasing so then the breeders also know that if they are getting milk from the camel regularly, then its meat, as in, why should we send it for slaughter then? So that issue will also be solved. But yes, even that (meat) can be a source of income for people. But then that's not a regular source, it is more of a last resort according to them. These breeders will keep it, but if we're talking about a middleman, so then, for them it may also be a primary source. But for the breeders, it is the last resort.

Interviewer: Last resort?

Dr. Seth Singh: Hmm.

Mahendra Bhanani: Anishaa Ji, you mentioned the milk, yes? So, a year ago, we have got an approval...a recognition from FSSAI that the milk is consumable. But, 2 years ago, the government of Gujarat set aside INR 3 crore for the milk, where to store the milk or pasteurise it. So that was done already. When we first started off, we faced this FSSAI problem, which we spent one year trying to find a way out of, okay? Other than that, we now have recognition from Amul and this very year, starting September, we've given 10,000L milk to Amul. They've taken 10,000L with them, and they're planning to launch chocolates made of camel milk, especially, 2 days before Diwali. And after Diwali, in Kutch itself, at the big Amul centre that we have here, from there, they're planning. Small pouches, earlier they were planning to sell the milk in bottles of 100g or 200g each, but that is a little costly, so if they sell it in pouches, it'll be a reasonable price for everybody. So after Diwali, the milk will be available in packets and we have recognition from Amul as well. Privately, there's Aadvik, then there's two-three people from Baroda, they come to Kutch regularly and take away 500-600L of milk. Then there's people in Mumbai and Chennai, for example, who're especially ordering the milk so for them we pasteurise it and parcel it specially. Also, milk from Rajasthan and Kutch is regularly supplied to places like, in Mumbai, around 350L, in Delhi and the areas surrounding it, around 450L. It's special camel milk, that's why.

Interviewer: Okay.

Dr. Seth Singh: So what we're trying to say is, I won't say it's Sahajeevan alone. The department, Sahajeevan, and the media, they've all worked together and because of this, if you compare what their life, their economy, their, I mean, the status of everything in general, from 7-8 years ago to what the status is now, you'll only see growth in that, ultimately, okay? The graph is only increasing towards the positivity. And now, like the Amul thing, all of this is positive. This is great integration, not just for Kutch, but for the survival of camels all over India, as well as from the breeders' economic point of view.

Mahendra Bhanani: Here we have only 13000 camels. There's 1.5 lakh in Rajasthan.

Dr. Seth Singh: Most of them are in Rajasthan.

Interviewer: All of these are Kharai camels?

Both (Dr. Seth Singh and Mahendra Bhanani): No, no they're different.

Dr. Seth Singh: Like, here in Kutch we have two breeds, there's 7-8 breeds in Rajasthan, okay? Our Kharai (camel) is the 9th camel breed, okay? So at first, from Gujarat there was one: Kutchi camel, and the rest of the 7 were from Rajasthan. So the maximum population is present there, but initiation, good initiation and success, might be Gujarat's destiny, so then their work is being done from here.

3) Interviewee: Meena Ben Rabari

Interviewer: Anishaa Gupta

Location: Jadhva

Interviewer: So you are Rabari, right?

Meena Ben: Yes

Interviewer: So exactly how many years ago did your ancestors come to this place?

Meena Ben: It's been very long. We are originally from Jaisalmer. We've come here from Jaisalmer. Half of our ancestors left Jaisalmer to live in Gujarat and other half stayed in Kutch. Then those who stayed in Vaghad, were called Vaghadiya, those who stayed in Kutch were called Kutchi Rabari, those staying in Gujarat were called Gujarati Rabari and those from

Rajasthan, Rajasthani Rabari. It's been around five hundred years. It would have been roughly 200-300 years at least, that we've come to Kutch from Jaisalmer. To be honest it would have been 400 years. Our ancestors are from Jaisalmer. We're not from here originally but from Jaisalmer.

Interviewer: What is the history behind the birth of your tribe? Does it have anything to do with camels?

Meena Ben: Yes. Maldhari; those who own camels are called Maldhari Rabari. Camels are very important to us. In Kutch as well, camels are very important. Mostly all Rabaris used to own camels, but it is not like that anymore. They have started owning cows, buffalos, and goats now.

Interviewer: We have heard this tale where we were told that Rabari were Lord Shiva's creation.

Meena Ben: That's completely true. So you're asking me how our tribe was born? May be it was four or five. I'm not very sure about Lord Shiva's tale. It was something like this: Two girls were supposed to get married and there were many suitors for them. Now, Shiva got confused how to settle this problem as there weren't enough girls. He converted a female dog into a girl by tying a thread to it. Similarly he converted female donkey into a girl by tying thread to her. Now God said what do I do now? Then there was one girl, Sudh Rabari Sambal. Here in this village, if you go to this village it is called Sudh Rabari Sambal. First Shankar Bhagwan only...

Interviewer: Okay. You mentioned one word Sambal ? Can you tell us more about it?

Meena Ben: Yes, Sambal Rabari.

Interviewer: Who is he and what is the connection between him and the story of Lord Shiva?

Meena Ben: Yes there is a connection between him and Lord Shiva. The first thread tied by Shiva was to a Rabari.

Interviewer: Is it true that Rabari were put on earth by Lord Shiva for camel breeding?

Meena Ben: It is true. Camel breeding and rearing is our first and foremost job. It's been like this since ages. Even at my mother's place we used to breed camels.

Interviewer: Even though you've stopped rearing and breeding camels you're still called a Rabari. Why is that so?

Meena Ben: It is true, the first and foremost job of a Rabari is camel breeding but still we are called Rabari Maldhari.

Interviewer: What is your relationship with the Fakirani Jats?

Meena Ben: We do not have any relation with the Fakirani Jat except that they breed and

rear of our camels.

Interviewer: So there is no other relation between the two communities?

Meena Ben: Yes, that is all.

Interviewer: So do you not know them personally?

Meena Ben: Yes, we do because of our camels we know them.

Interviewer: So the only conversation you all have is limited to the camels and nothing else.

Meena Ben: Yes, we don't talk about anything else.

Interviewer: Is there any camel festival that the Rabari's celebrate?

Meena Ben: Festival?

Interviewer: In Gujarat?

Meena Ben: Camel festival?

Interviewer: Festival where the camels are taken and are worshiped?

Meena Ben: Yes, yes. The fast we keep on Dasavan is for the camel. We worship them then.

In

happens in the Shravan month, Two days before the Shravan month. This is the camel festival. We worship the camel.

Interviewer: Are the Fakirani Jats invited to this festival? Do they celebrate it with you all?

Meena Ben: No, they don't celebrate it. Only we celebrate it. But the Fakirani Jats come to the fairs. Recently, here when there was a fair in Banni, Anandi Ben had got many Fakirani Jat along with her. And there was a Mela (fair) in Rajasthan, where they got decorated the camels, then Ajipi's Mela. They celebrate a lot in fairs. Then we have a meeting in the morning. We make the girls sing. In Banni we celebrate a lot.

Interviewer- What work do you do at the Maldhari Sanghatan?

Meena Ben: They invite us to attend the meetings.

Interviewer: What are the tasks and responsibilities assigned to you?

Meena Ben- We and the Fakiranis discuss about from where to give milk, and what will be the market price of the milk. We tell them to increase the prices of the milk. We talk about selling of the camel wool. We attend the meetings.

Interviewer: Can tell why are you wearing those earrings?

Meena Ben (pointing at her earrings): These? When we get married, our in-laws give these to us.

Interviewer: Are those made of gold?

Meena Ben: Yes, they are made of gold.

Interviewer: What about the clothes you're wearing?

Meena Ben: This is what Rabaris wear.

Interviewer: Everyone wears these clothes?

Meena Ben: Yes, everyone wears them. Those who are economically well off wear different clothes. (Laughs) Otherwise all Rabari wears these clothes only. In earlier times, the *ghunghat* (veil) were made up of wool. It was very warm.

Interviewer: Was it made of camel's wool?

Meena Ben: Yes. It can be of camel's wool or ghetto. Workers used to make it and then we used to wear it. Now everything is gone.

Interviewer: Because all the camels were sold?

Meena Ben: Yes

Interviewer: And the things you made from the camel's wool, did you sell them back then?

Meena Ben: Yes

Interviewer: So you used to make something from camel's wool and then sell it off?

Meena Ben: Earlier, we didn't sell the camel's wool much but instead use it make Vaana from it for the camel itself. But now many things are made from the camel's wool like muffler, floor mats and more.

Interviewer: Can you tell us about the Bharat Kaam that the Rabari women do? How did you start practicing it? How do you sell them?

Meena Ben: It has been practiced since ages. The women don't do it as much as they used to do it before. This Bharat kaam is very necessary as both our daughter and daughter-in-law need to have it. Now it is not necessary. First there was a tradition of doing this embroidery work and this who couldn't do it were mocked upon. When our daughter get married we are supposed to give this Bharat kaam to them so they can take it with them to their husband's house and daughter-in-laws are supposed to get theirs from their own house.

Interviewer: Don't you sell this work?

Meena Ben: We do sell it.

Interviewer: At what price do you sell it?

Meena Ben: It's very expensive.

Interviewer: So exactly how expensive is it?

Meena Ben: The ones we showed you, would be sold for ten to fifteen grand at least. If you ask us to make a wall clock for you, it would cost around 10 grand for two of them.

Interviewer: So the money you get is used for Bharat karma again?

Meena Ben: Yes the materials like thread, needle, beads which we need for this are bought from the same money we earn.

Interviewer: When and how did you buy this house?

Meena Ben: First we were daily wage workers, so we collected money and bought this house. Earlier, we had a *kaccha* house made of mud.

Interviewer: So you've made this house?

Meena Ben: Yes

Interviewer: So five years ago, you made this house with your own hands?

Meena Ben: Yes, first we had a *kaccha* house that side, we did all the work by ourselves.

Interviewer: What about this house?

Meena Ben: This house was made by the workers. But we did put in some efforts in the making of the house.

Interviewer: How much did it cost you to hire workers to build this house?

Meena Ben: We spent around 5 lakh of rupees behind this house.

Interviewer: Thank you so much for the warm welcome and for answering the questions. We are very grateful to you.

Meena Ben: I'm glad you all enjoyed. We also had fun.

Interviewer: You have an amazing personality and you seem like a very strong person.

Meena Ben: If we have your well wishes, God will keep us happy. God has given us many difficulties in life.

Interviewer: Our well wishes are always with you.

4) Focus Group Discussion

Participants: H.P. Verala (FO1), Ali Asanjat (FO2), J.P.Dangar (FO3) - Forest Officials

Nur Mubaarak (FB3) - Camel Breeder

Moderator: Anoushka Zaveri

Interviewer: We are here for a college project. Our aim is to research about the Kharai camel, those who participate in its breeding and rearing and the economy that surrounds it. To start with, please tell us your name and in what way you are connected to the Kharai camel.

FO1: My name is H.P Verala. I am a forest guard at Jakhau coast and that is my responsibility. Because of my job, I am closely connected to mangroves and that is my connection with the Kharai camel.

FO2: My name is Ali Asanjat. My village is called Neemrivand. I am a guard for the forest department.

FO3: J.P Dangar. Forest guard, Kosa.

FB3: Nur Muhammad Mubaarak. I am a Kharai camel breeder.

SO: My name is Mahendra Bhanani. I am from Sahjeevan. I am working in partnership with the Camel breeders association.

Interviewer: If you could tell us in further detail, what your connection with Kharai camels is? He is a breeder, for instance. Hence, he grazed, rears and breeds the camels.

FO1: Honestly, I as a forest guard and the Kharai camel are sworn enemies. I do not mind saying this on camera because it is the truth. We are always at loggerheads with one another. We cultivate mangrove plantations and if camels enter them, they are completely destroyed. We incur losses and have the additional burden of reporting to our superiors. The camels enter the plantations but I have to face the music. I am completely against camels. I will speak the truth even if I am on camera.

FO3: The Kharai camel is useless to us. I mean, we just do not get along.

FO1: The forest department and the camels are extremely against one another. This is the truth but we try to look at this situation from a human perspective. That is why we try not to disturb them. It is the profession of their ancestors and it is their heritage. They are locals and permanent residents of this region so we have to cooperate with them. Even then, one thing is certain – we are against Kharai camel breeding. We are developing mangroves and trying to conserve them. They are growing little by little. The entire country is campaigning for mangrove conservation in one way or another. Everywhere in the India, it is believed that the mangrove should be saved and conserved. It plays a pivotal role in controlling global warming and it acts like a barricade in the sea. The government has also pledged itself to the cause of mangrove conservation. A lot of research is being done on the same. This is why we want to save the mangroves and have been trying to do so for several years. Our efforts are yielding results but slowly and gradually. At some places, the mangroves are dying. The fish

mate in the mangroves and thus, by conserving mangroves, we are also conserving marine ecosystems. Even birds and animals build their homes in them and mate in them. Thus, mangroves are extremely valuable and necessary to protect. The absence of mangroves will allow tsunamis to enter and the sea to advance into the land. It is the responsibility of each Indian, even yours, to protect the mangroves.

Interviewer: Would you (to FB3) like to respond to this? He (FO1) is claiming that mangroves are depleting.

FO1: I am not saying they are depleting. They are growing but at a very slow rate.

Interviewer: (*Agrees*) Would you like to say something to this (at FB3)?

FB3: I have nothing to say.

Interviewer: FO1 is against camels and their breeding.

FB3: He is not blaming the camels.

FO1: Not directly because of the camels.

FB3: (*interrupting*) Only where there are cultivated zones.

FO1: (*agrees*) It is when they wander into cultivated zones that we face losses. Otherwise, we have no issues with the Kharai camels. I told you that it is the profession of their ancestors. The Kharai camels have been around for ages. You will not get to see Kharai camels in their natural glory anywhere but here. If you go to the south, you wont find Kharai camels. They live only here in Kutch. You know how the camel is the national animal of Rajasthan? Similarly, is Kutch becomes a state, its national animal would be the Kharai camel. You were saying (at FB3)?

FB3: That is exactly what I wanted to say.

FO1: (To FB3) We know these things but they are not locals so they are not aware, right?

FB3: (*agrees*) Yes you are right.

FO1: (to I) You ask the next question.

SO: No but I would like to add to this discussion. We have done a lot of research here on all the *bets* of the area – Senri *bet*, Bagotra *bet*. Our nation was made after independence.

Yesterday we saw Pachcha Bhai's filed records. They said that the *maaldhaaris* or breeders of this region had been given rights by the king himself. All these *bets* (English: atolls) were in the names of the region. The forests came up only after 1948 and 1951. The camels are as essential to the mangroves as the mangroves are to the camels. According to scientific research, wherever the Kharai camel urinates or defecates, there are chances of new mangrove plants growing.

FO1: (*agrees*) That is what I said. We try to somehow support the process as well. I just used different words. We tend to use a slightly stronger tone (*laughs*). We do not know how to sugar-coat.

SO: After talking to several camel breeders and resource mapping their responses, the book that we have generated states that the mangrove needs the Kharai camel.

FO1: (*interrupts*) You know how the circle of life works, right? The two depend on each other heavily is what SO is trying to say and he is right too. It is the truth.

Interviewer: You mentioned multiple times about your plantations. Can you tell us about them? What are these plantations you are talking about?

FO1: The government has proposed various plans and according to those, we are given the job to plant mangroves in specific areas. We complete the target and the governmental process by getting laborers to work in these areas and cultivate mangroves. This is the work we do. I told you earlier that it is our job to protect mangroves or else it will begin to become even more hot and sunnier in the coming days. This you and I both know. A lot of projects have been initiated for this cause. Just like the Rally for rivers that proposes that we should plant trees for one kilometer on both sides of river banks. This project has been started by some baba with hair just like (to Nishant) you which is why I told you that you have nice hair (*laughs*).

Interviewer: As he said, your camels do tend to wander into governmental cultivation zones. Are you facing any difficulty due to the existence of these zones?

FB3: Look, (*is interrupted by FO1*).

FO1: See, we understand and acknowledge that it is animals who are walking into our plantations. They do not possess the ability to exercise desecration. Sometimes, their caretakers accompany them. Other times when they are by themselves, we let them go. We do, however, warn the breeders that their animals are walking into our cultivation and next time, there will be consequences. This clip should not go out (*laughs*)

FB3: We try not to irritate them for no reason or just for the sake of it. Sometimes, our herds to enter into government plantations and we do not deny that. We understand their position too.

FO1: All villagers be considerate and they are.

Interviewer: Do you think (to FB3) that the mangroves are benefitting from the camels?

FB3: The young plants do grow faster because of the camels. There is no question about that.

Interviewer: Do you (to FO1) think that the mangroves are growing because the camels are eating them?

FO1: I am not very experienced but so far, I do not feel that the mangroves are growing because the camels are eating them. He is (*pointing at FO2*) experienced so he may know.

SO: (To FO2) Do you think so? Do you think that because of camel saliva or urine, the mangroves are growing?

FO2: No I do not think so. I have not noticed enough, maybe.

FO1: As I said, the forest department and camels just do not get along.

FO2: Camels eat the topmost leaves of the plant. If it is an old plant (*indicates size*) then the leaves will grow back but if it a young plant, there is no chance of them growing.

FO1: There is no chance of them growing.

FO3: There is no chance of them growing.

Interviewer: Are these governmental plantations benefitting you? (to FB3)

FB3: Yes. 100%. They provide us with employment.

FO1: We only employ people from the nearby villages as labourers. Nobody from outside is given the job. Only the people living in the village where the plantation is being done are allowed to take up a job in them.

SO: One thing that you missed out on – FO3 said that if the mangroves increase, the breeders are the ones who will benefit from it.

FO3: We are not going to work here forever and when we leave we are not going to take the mangroves with us. So if they grow, they are for you to reap the benefits from.

FO1: We only work here. After a few years, we will leave. The government transfers us from time to time.

FO3: You (to FB3) have to take care of it and work for it.

FO1: We are not going to tie the mangroves to our heads and take them with us. It is you (to FB3) who has to look after them and grow them.

Interviewer: (*to B1*) You said, that the camels face difficulties in reaching the mangroves. So what kinds of difficulties do they face?

B1: There is lots of mud and sand, which is problematic for the camels to reach the mangroves

Interviewer: (*looking at FO1*) would you like to add anything else to this topic?

FO1: Ask the other forest officials, as they would know.

B1: He wouldn't know much about the problems. We know because we travel and walk with them through the mud and sand. He (*FO1*) goes to the mangroves by the boat, and they work from the shoreline to stop the wind. We know, because we walk on our feet to reach the mangroves.

Interviewer: *(to B1)* So you feel like he has a different view on the problems the camels face because he works from the outside, whereas you have deeper insights because you work directly with the camels?

FO1: If you yourself go to the mangroves, you will find that your legs will sink into the sand, till your knees. We have ourselves just walked 9km, and our feet were sunken in till our knees. I have a video on my mobile phone of the same. So that is a major problem for the camels, and us. Our work is very tough. Ahead of this is Pakistan, so this is our duty only. However, the government has appointed us, so we have to give our 100% to this.

Interviewer: Firstly you said that you and the Kharai camels are at loggerheads with one another (and that you all share a “chattis ka aakda” relationship with them), following which you said that it is a cycle, and you support them as much as you can so...

FO1: *(interrupting the Interviewer)* See at the end of the day we are also human beings, so we do care about the animals around us. Just like how you work hard to earn your food, so do the breeders. Any man, for his food, will work as hard as he can. And we do as much as we can to ensure that there is minimal harm and damage to the camels.

Interviewer: We have heard that the government and the forest department have planted salty plantations which the Kharai camels can feed on here, so that they don't have to travel to the mangroves...Is it true?

FO1: Till now...

Interviewer: *(interrupting FO1)*, plants like Babool are being planted?

FO1: Yes yes, Babool plants are being planted around.

Interviewer: But the camel survives on the mangroves...so how exactly does this work? Even though they are planting plants here for the camels in order to stop them from going to the mangroves, they still need the mangroves so...

B1: Mahendra bhai will speak about this

FO1: *(pointing to Mahendra Bhanani)* you are researching about this right? So tell them what the problems are and why the camels are migrating to this side of the region.

SO: You give them your opinion since they are asking you.

FO1: No first you answer this question; I will then share my opinions with them.

SO: Yes, even though the forest department is creating these plantations, the Kharai are still going to feed on the mangroves since they have been doing this since years now. If they don't go to the mangroves, then there is no other food for them. In the winters, the Kharai will stay here on the mainland, but soon they will go into the mangroves.

FO1: (*speaking to MB*) So you tell us why do the Kharai stay on the mainland for these months and eat and then go inside to eat?

SO: They stay outside the mangroves because it's their breeding season, and they produce babies during this time. This is the reason they stay outside, and after which they go back into the mangroves.

FO1: So why don't they breed inside the mangroves? The land is good there also.

SO: No it doesn't work that way. There is no water also for them there, and their breeding season lasts for 4 months out of which for 3 months they stay outside the mangroves.

FO1: So if they can breed outside, then they can stay outside as well right. It's not necessary that they must live inside the mangroves.

SO: No it doesn't work that way.

FO3: If 3 months they can stay outside the mangroves then why not the entire time?

SO: They just go outside for the breeding and deliveries of the babies, other than that they stay inside the mangroves.

Interviewer: Have any other wildlife in the area or aqua marine creatures benefitted from the Kharai camels?

FO1: No, not as such.

Interviewer: (*looking at B1*) what do you think?

FO1: No even he doesn't think so, because there are no benefits. There is a clear loss.

Interviewer: You don't think that it is also negatively affecting the Kharai camels? From all this I've understood that either we can save the Kharai camels or we can save the mangroves.

FO1: Yes we can save either of the two.

Interviewer: Correct, so...

FO1: On one hand the government says that we need to protect the mangroves, but on the other hand they also want us to conserve the Kharai camels and prevent them from becoming extinct. But we are the ones who are stuck in the middle of all this suffering. We don't know what to do. The breeders are the villagers, and we have to make them understand and have to work in a way to combine the welfares of them and the government as well, so we get stuck and don't know whether to side with the breeders or adhere to the government. I get my salary from the government so I perform my duties religiously and loyally, and I don't have the liberty to take any actions without the government's permission.

Interviewer: So which is the middle path that can be taken?

SO: (*looking at B1, FO3, and FO2*) The Kharai need the mangrove to feed on, but the forest department wants to protect the mangrove so what should be done? Should we stop breeding

the Kharai camels? My experience and learning from some old camel breeders, since I represent them (and whatever knowledge I have is their knowledge), is that when the Kharai camels feed on the mangroves, it is similar to the method of pruning that we do in our gardens. When the camels eat the mangrove plantations, the froth from their mouths helps to regenerate them as 4 new branches can grow out of 1. In addition to this, wherever you have planted the plantation, and the camel's hooves, urine, and egested material falls on it along with a seed of the plantation, the mangrove can grow.

FO1: *(to MB)* Have you seen this happening? Do you have any photos of this?

SO: Yes I have photographs of this

SO: What do you think that after 1947, when the forest department was established, they were the ones who carried out all the plantations?

FO1: No, there are natural plantations also, and even though we plant, ever year nature also equally provides these natural plantations to the environment

SO: I have certain documents that were given by the king of Bhuj on copper plates, that the Bagodhara...

FO1: *(interrupting)* Even I've seen the copper plates, through a person in Jhakau...

SO: *(interrupting)* There are these plates in Jhakko and Banada...and years from now, before India got it's independence, infact since Savla Pir, the 7th centaury, the Kharai camels have been around here, even though there was no Forest Department or any plantations...So what do you think? How did it work at that time?

FO1: We don't know how it used to work...thank you.

SO: *(to the interviewer)* Do you want to ask them any more questions?

Interviewer: In this ecosystem, not only do the mangroves grow, but also there are different kinds of plantations, and not just the Kharai camels, but even other types of camels...So what is the relationship between all of them? How do we interpret the symbiotic relationship between the ecosystem and its living organisms, and how does nature take this relationship forward?

FO1: This is the life cycle, wherein every one depends on something or the other. A deer depends upon grass for its food, a snake depends upon a rat for its food, and that's how it continues, and this has to be maintained, because if this cycle gets disrupted, the entire ecosystem will collapse.

FO3: *(interrupting)* we are living beings, so we must try and save any other kind of living organisms...

FO1: *(interrupting)* if we save nature, nature will save us.

FO3: the cycle shouldn't break...

FO1: (*interrupting*) that way, there is the Great Indian Bustard bird species, you might have an idea...there are lots of initiatives that are being taken in order to save this species. They eat both vegetarian and non-vegetarian food...thus everyone is dependent on something or the other, and therefore if we protect nature, nature will protect us. Just like how the Kharai depend upon the mangrove, so the others like the Great Indian Bustard birds.

SO: (*to FO1*) I have a question, sometimes breeders even take cows into the mangroves right?

FO1: Yes they do. I can take you also to the mangroves...

FO3: (*interrupting*), for us everyone is equal.

SO: So basically you are saying that there shouldn't be any damage done to the mangroves and the people who look after it...

FO1: Yes, there shouldn't be any damage done.

FO3: This is true for any kind of environment, be it for people who manage mangroves or jungles for that matter. We are fulfilling our duties and doing our work, and try to ensure that there is minimal damage done.

Interviewer: (*points to B1, and FO2*) would you like to express your views on this?

B1: Mahendra bhai will speak...

SO: (*laughs*) You all should speak. Whatever information I collect, I acquire it from the camel breeders, and sometimes I go to check and validate the information, but other than that, I rely upon the breeders for my knowledge about the camels.

I: Do you think that in the future, there is a solution or a middle path that can be implemented in the case of the Kharai camels and the mangroves?

FO1: See that is in the hands of the government, we are very small components of the department, so...

Interviewer: But we want to know if you think that you can do something to solve this problem.

FO1: No I cannot answer that question, I don't have the right to. Tomorrow if this clip of yours reaches some of our senior officials, they will confront us and taunt us that we think we have become such big officers.

SO: There is a hierarchy; you will have to ask their senior.

FO1: You should interview our senior, you will get much more information in detail. We are the ground level workers.

Interviewer: *(to B1)* Do you think a middle path can emerge in the case of the Kharai camels and the mangroves?

FO1: *(looks at B1)* Do you have any hopes that a solution will come to solve this problem?

B1: No I don't have any hopes.

FO1: *(to interviewer)* He doesn't have any hopes. No one over here does.

B1: But I must say, that the Kharai camels have been here since a long time. I have worked with them; even before 1947 I have had them...

Interviewer: So for you, the Kharai camels comes first, and then the mangroves?

B1: Yes. But we do need to do something to protect the mangroves also. The camels are ours, the mangroves are ours, and the workers are ours, so we must do something to protect them all.

SO: Around a year ago, when Viyul Sir who worked here as the DCA, I met him personally, and presented my research book in front of him, I told him that protecting the mangrove plantations are also necessary, and the feeding of the Kharai camels on the mangroves is also important. So I told him that if you give us a middle path, then we could do something. His response to that was that he would let the camels go ahead, but they must not interfere with their plantations. I met other officers, who are ready to give way to the camels...

FO3: *(to SO)* did you go and follow up with the officers again?

SO: *(nods)* see I went with what the officers said to me...

Interviewer: So you'll have no hopes that this tradeoff between the Kharai camels and the mangroves will ever settle?

FO1: It is all up to the government to do something now. It's not in our hands.

SO: They follow the orders they get from their seniors. If they tell them to let the camels go, the guards will do so.

Interviewer: Thank you so much for spending your time talking to us, and we have learnt a lot from whatever information you have shared with us.

FO1: *(joins hands)* It is great that you have come such a far distance to learn in depth about the camels and the mangroves.

Interviewer: Can we please take group photograph with all of you?

FO1: Yes sure. Even on our mobiles we will take some.

5) PAANCHA BHAI RABARI

Respondents: Paancha Bhai Rabari, Sonal Bhai Deva

Interviewer: Anishaa Gupta, Anoushka Zaveri

Interviewer: Can you tell us your names and what you do?

Respondent 2: My name is Sonal Bhai Deva, and I take care of buffaloes.

Respondent 1: My name is Paancha Bhai Rabari. My traditional occupation has been camel breeding and rearing, and buffaloes and cows came later. This occupation is approximately 350-400 years. As time progressed and this occupation started shrinking, other cattle came in, but majorly it was camels.

Interviewer: So you mentioned that your ancestor was gifted Kharai camels by Savla Pir, so can you tell us how the Kharai camels came into the picture?

Paanchabhai: There were 2 brothers, Kumma and Mula and there was only one camel. The elder brother had the camel, and the younger had nothing. The younger one was a very good friend of Savla pir, and greatly admired him and worshipped him. He went to village Pipar to visit Savla Pir, and Savla Pir sensing his distress asked him what happened. He said that he had nothing as the only camel they had was with the elder brother. So, Savla Pir fashioned a camel out of wax, and gave it to him and said walk for 30-40 km with this camel till the seabed, and the camels that come out of the sea are yours, but don't look back. So he went, and walked. He heard camels behind him, and overcome by curiosity, he saw that camels that were emerging out of the water were coming towards him, but then they stopped. That ancestor of mine had around 2000-2500 camels. Even now, we are many brothers, 2 cousins (dad's brothers sons), and we still have around 900 camels. We haven't sold even a single camel, although the brothers may have. They died natural deaths due to floods, drowning if anything. In many villages like Neembrivand, Mohadi, Bhavnagar, Khambat etc, the Fakirani Jats now take care of our camels. Around 20-25 households in each village take care of our camels, and it's entirely out of their large goodwill and niceness. Even if there is no market for camel milk or benefits from it caring for the camel, they still take care of them. We don't have to worry. Since the past few years the newspapers have been saying there will be a market for camel milk soon, so hopefully there will be, but the the camels are taken care of by them irrespective. Earlier, the female camel was sold in Rajasthan, but now, the pride of Rajasthan is the camel, so there has been a rapid decline in the market there as well. As of now, there is nobody who wants the camels as there is no economic benefit.

Interviewer: So, how is your relationship with these Fakirani Jats who rear your camels?

Paancha Bhai: 400 Years ago, when Savla Pir gave my ancestor the camels, he said that we are the owners of the camel, but his people, the Fakirani Jats can always be trusted to take care of the camels. When my ancestor was given the camels he was so happy, but worried as to how will he possibly take care of so many camels. There are so many Jats, but the Aga Khan followers are the Fakirani Jats. Savla pir said that you have to trust the Jats and that there has to be an understanding, and they will help take care of the camels. Till today, there is no community head, no Rabari who has ever said the Fakirani Jats hid their profits/sales from us, cheated us or anything of that sort. That kind of faith has to be there. There hasn't even been one such case. If I go to the Jats who take care of my camels, they tell me this is a calf from your camel, this is your female camel, this is your male and so on and I take their word for it. If I have 800 camels, they tell me that these are your camels. I won't recognise all 800 of them obviously, and I believe what they're saying. There is complete trust. They recognize the camels very well. Some have 200, some have 50 and some have 5. That's how it works. The way it has been going on for the past 350 years is: I have a son, I'll give him camels, he may give it to his son and so on, and they will keep entrusting the camels to the care of the Fakiranis.

Interviewer: So, what you're saying is, the Rabari-Fakirani relationship is the same way it was 300-350 years ago?

Paancha Bhai: Yes, exactly the same. Even today in my house, there is the same faith. We trust them enough to believe that they will never lie to us, never cheat us and we will never do them wrong. Our entire wealth (laughs) is with them only.

Interviewer: So, your relationship with them is only work related, or do you meet during festivities, or celebrate any occasions together?

Paancha Bhai: So if there is a marriage in our community, we'll give them a feast, or if there is a happy occasion there, they'll call us. That keeps happening. There is a Savla Pir fair that they organize, and not just us the entire Gujarat goes there.

Interviewer: So, even you believe in Savla Pir?

Paancha Bhai and brother in unison: Yes of course.

Paancha Bhai: we believe in him very, very much. You can say that he is greater than God for us. When we had nothing, not one camel, not one goat, that is when he blessed us. For someone with 2000 camels back then, he was practically the owner of Gujarat! The Maharaja of Kutch used to come there near the river too and believed in the Pir. Savla Pir was a Fakir, what is Hindu and Muslim to him. We were all the same, all his children.

Interviewer: So, what else do you do to run your household?

Paancha Bhai: Now we have buffaloes. Our primary occupation is in milk. We have 70-80 buffaloes, and we are four brothers. I have around 20-25 buffaloes, and we go to Naliya and there we sell our milk. It is also collected for a dairy: Maahi Dairy. This is what we do.

Interviewer: Okay, so, you yourself don't go to rear the camels, but you've still kept them. Why?

Paancha Bhai: What can I do? Savla Pir said don't sell the camels, and we're still hanging on to that thread. (Laughs) Yes, there is no monetary value from them, but we can't do without them too. Okay, even if there isn't anything monetary in it for us, at least those 20 Fakirani Jats who rear your camels are earning their daily bread through these camels. I am still managing with my buffaloes, and I understand I'm away from the camel market, but let's hope to see a day where there is some demand for camel milk. Let's hope it works out one day.

Interviewer: Did a Fakirani Jat ever buy a camel from you?

Paancha Bhai: No, they don't buy them.

Interviewer: Only rear?

Paancha Bhai: Yes, they only rear and take care of them.

Interviewer: So in your family, is it only the males who have camels and engage in buying and selling them and taking care of them or do females also participate?

Paancha Bhai: Yes my mother did it for a while, my paternal grandmother did it, and my grandfather was in the fields all 24 hours with the camels! (laughs)

Interviewer: So what relationship did your ancestors have with the king that you mentioned?

Paancha Bhai: (Mumbles) There was a village near Aliyabet. (thinks) CHHANU, is the name of the village. The village didn't see rain for three-four years. So they wondered what to do there now. With the king it was like that was our ancestral village, near the river, and that was also the place for their elections, hence, he used to come here. We were related to them, and they were related to others he knew and he said thought of my ancestor as a nice person and hence the maharaja let us go there.

Interviewer -So, how many camels do you have? The breeders that we already met didn't have too many. Also, has the government helped you in any way?

Paancha Bhai-No, in no way have they helped

Interviewer (1): (In between) Nothing at all?

Paancha Bhai- (continues) No! Nothing. Sahjeevan is an organization that has helped us a lot. They help us camel breeders so much, and have been doing so since the past 5-7 years. There isn't any help from the government people. But Sahjeevan has been doing great work since the past 5-7 years. They go to the camel breeders and give the camels' injections, medicines, or anything else; all the breeders have been getting it since the past 2-3 years. Apart from that, there is no help from the government. Let me tell you how it is, Government must be giving some help, to someone, I'm not saying they don't, but the thing is we aren't really getting any help. I have 800 camels, just for namesake (laugh), no real work, because if there is no money in the camel business, what will do and why will we do it?

Interviewer (2) So historically speaking, How did the first Rabari migrate to Kutch?

Paancha Bhai- Firstly, you see these black clothes that my mother is wearing, and the black turban that we men tie, all of this comes from Jaisalmer in Rajasthan. We are all from Jaisalmer. Approximately, 1500 or 2000 years ago the ancestors left Jaisalmer. They came to Kutch. The way it is in Jaisalmer is that the fort (*kila*) is there, but there are no Rabari people. Our entire village used to be there, but we left. There was some problem in the village, some kind of fight and we left. So that is why so many Rabaris are in Bhuj now. There, we had 74 villages, here we have 24 villages in Gharna, and 54 spread over Nakhatrana, Bhuj and Lakhpat.

Interviewer (2)- Okay. So, these Kharai camels feed on mangroves (*cher*) right? Do you think the mangrove population is dwindling because of their grazing?

Paancha Bhai- (smiles) No, no! Camel grazing will never do that. The forest department, just came into existence, the camels have been around and grazing for more than 300 years. The factories, everything just came, and had camel grazing caused any damage, how could the mangroves have sustained for over 300 years? I completely disagree. They aren't decreasing, they are increasing! You know how people put henna (*mehendi*) in their hair, and then they trim their hair, and then the hair becomes, what do you call it, long and frizzy? Similarly, people keep these plants outside their house for good luck and grace. What happens to that is it becomes big again right after it's trimmed; similarly the mangroves grow again after camel grazing. It's helpful.

Interviewer: So do you think them grazing on the mangroves is beneficial?

Paancha Bhai: So if you drink the milk of a camel who feeds on mangroves, and on the milk of a camel that doesn't, you will realize the difference between the two. I say that with 100% certainty. One can definitely notice the difference. It has a lot of natural goodness, it belongs to the sea. I don't know what it is that makes it so healthy. The thing with camels is that they eat something, and within an hour, traces and smells of it will be there in its milk. Suppose the camel eats neem, within an hour the milk will smell and taste of Neem and deduce that the camel ate neem. Mangrove milk is extremely healthy and very good milk.

Interviewer: We read and heard somewhere that the Rabari community has a very unique way of preserving their traditions and history, and keep records. Could you elaborate upon it?

Paancha Bhai: Yes so, you saw what my father wrote. I have kept it carefully; similarly my son will keep something I write and so on...

Interviewer: can you tell us more about this?

Paancha Bhai: (flipping through his file) some of these are 300 years old. This is our Sahjeeven Sanstha. This was from 1953, but I also don't know this language. This must be around 200 years old. It is so old that I don't even understand the language in which it is written. These documents are from the Maharajas time.

Interviewer: In what context does this happen?

Paancha Bhai: This document has been signed by the Maharaj and it is about the Kharai camel. It states that from Jhakhau to Koteswar, the areas are allotted to Rabari's to graze their camels. We Rabari's are free to roam and graze our camels in these areas. See, it has been signed with the official seal – the peacock. I don't know what the symbol is now but at that time it used to be a peacock. All of these are 200 years old. In 1965, the government had come. On the 21st of January 1968, the government had been established.

Paancha Bhai: In 1968, when the government had been established, they said that the camel breeders must pay Rs. 140. When the government came, they met the camel breeders. The officials asked the breeders to pay Rupees 140. The first time the government ever issued a receipt was to us, and now they've handed that responsibility to the forest department. (pointed at his documents)

Interviewer: Do you have any documents of the time when your family members such as your brother or grandfather got the camels?

Paancha Bhai: yes, a few pages in this document must have those details...actually no I can't find any here in this.

Interviewer: It's all right, no problem. Who are the Baarots in the Rabari community?

Paancha Bhai: According to us, we call Baarots *Attak*. Like in an office or *Gram Panchayats*, how there are name keepers, in the Rabari families there are Baarots who keep the names of all the family members.

Interviewer: And what is the relationship between the Raikar and Rabari's?

Paancha Bhai: Raika and Rabari's are the same. In Rajasthan they are called *Divasi* and *Raika* too. Here in Gujarat, they are called Rabari's. They are called Raika in Rajasthan because of their language, which is different from ours. Other than that, they are all the same thing.

Interviewer: Can you tell us a little bit about your culture and traditions? The art, the culture, like for instance, where we had gone, we saw the women were doing *bharat* work, so like that are there any art forms, or other cultural traditions your family practices?

Paancha Bhai: The *bharat* work is our tradition. Think of it as a skilled handwork. All of these people do it by their hands, and even till date this work is done by hand and not machines, because then it doesn't have any traditional value.

Interviewer: Do you and your family have any specific dance, music or rituals that you'll follow or any particular ways in which festivals are celebrated?

Paancha Bhai: Yes, in terms of rituals we have *wadare* marriages, and in terms of big festivals, then we believe and worship Mata ji. On the day of the 14th in the month of August, the entire village does not consume milk and no one goes to work on that day. People recite bhajans on that day, people play the *dhols*, and there is also a *dandiya raas* celebration. All of this on that one day: 14th day of the August month.

Interviewer: Is there anything about the Kharai camels in those bhajans and songs?

Paancha Bhai: Yes, the camels have great significance in our songs. Just like our Momai mata ji, we respect the camels a lot as well.

Interviewer: How do you'll carry out the camel puja?

Paancha Bhai: Just like how we do the puja's for our other male and female deities. People use *diyas* to worship them, like how you saw in my house; we light diya's and do the puja. We use *agarbattis* (incense sticks) to do the *dhoop*, and then we do an *aarti*. Initially people used to play instruments by hand, but now everybody just plays it from the phone even in the temple.

Interviewer: But there is no ritual of decorating the camels?

Paancha Bhai: We used to decorate them earlier, because it was our tradition. But nowadays this has reduced. This is because the camels stay outside. We have a lot of the decorating materials with us at our homes, but they don't come here to us, and we don't go to them. They come for a day, and the next day they return back to the sea because they can't live without it.

Interviewer: But this decorating tradition was prevalent during your grandfather's time?

Paancha Bhai: Yes earlier, on the 14th of August all the Kharai camels you should definitely come by the sea.

Paancha Bhai- We have 700-800 men there from our extended family (*kutumbh*). We all together make *Prasadi*, two consecutive mornings and evenings. Lunch and Dinner for those days is made this same way.

Interviewer- Yes. As you've mentioned how camel's milk is now being purchased by people and the market will be established soon, so in the future will you start rearing camels again?

Paancha Bhai- Yes. Hundred per cent. But demand of camel milk today don't motivate us to sell it. Take any kind of work, if you're not even earning 5 paisa out of it, will you feel like doing it? You won't right? Anyone wouldn't. But there are poor guys who are doing it. We have camel milk business over here, we pay them five paise. This is how buying-selling works. This is an old tradition. We've held on to it.

Interviewer- You said you own goat and buffalo..

Paancha Bhai- I own buffalos and camels

Interviewer- You have camels as well..

Respondent 2- All four brothers own camels together

Interviewer- Is buffalo's milk being sold? And what's the difference between rearing of buffaloes and camels?

Respondent 2- Camel's milk isn't being sold for now, people are only talking about it.

Whereas buffalo's milk is being sold and bought.

(**Paancha Bhai** interrupts)

Paancha Bhai- Buying a buffalo is as expensive as buying a Nano (Tata Car)

(P laughs) If camels become as expensive, nobody will look at buffalo.

If you go somewhere to buy a buffalo it will cost you around two to two and half lakhs of rupees.

(**Paancha Bhai** laughs)

Interviewer- What is the cost of buffalo's milk per litre?

Paancha Bhai- 55 Rupees

(**Interviewer** repeats and Paancha Bhai nods)

Interviewer- What about camel's milk?

Paancha Bhai- In Abdasa we don't sell it, but in Nakhatrana taluka the camel milk is sold for about fifty rupees.

Interviewer- So there is a difference in both..

Paancha Bhai- So see the problem is that my camel is here. If I want to give the milk in a dairy I'll have to travel 50 kms to Nakhatrana. I would have to travel a lot. There is a lot of camel milk, so there isn't a problem of shortage; the real problem is traveling. I leave in the morning, and by the time I come back its evening. After milking the camel in the evening, I'll reach Nakhatrana at round mid night. In the case of buffalo's milk there is a dairy in our village for it so it's easier.

Interviewer- Okay. Did you yourself used to rear your camels before?

(Lady (**Paancha Bhai** and respondent two's mother) in the background says something)

Lady - Yeah used to do it before.

Interviewer- Did you used to go to the mangroves along with the camels?

Lady- We don't go now. We used to go before.

Interviewer-(pointing at the earrings of the lady) this thing you're wearing, is it some kind of tradition?

Lady- Yeah, that is our tradition.

Paancha Bhai- It is like an ATM Machine. (says jokingly) First we didn't have any ATMs. People don't let you borrow money like that, but if you show them the gold they will lend you money then and there. (**Paancha Bhai** laughs) He will give you goods worth 5000 rupees in return of gold worth 2500.

This gold earring was like an ATM to us in earlier times. We've been hearing this from our childhood, my grandma used to tell me that son, it's necessary to keep gold with you, it could be used in times of emergency as all 365 days of the year aren't going to be good. People don't have money in their pockets overtime, but this gold we are wearing will be of use then.

Interviewer- is there any specific age where a man starts wearing these gold earrings or they wear it since their childhood?

Paancha Bhai- I've been wearing these since my childhood when I was 3 or 4 years old. The women wear them after they are married.

Interviewer- Is there something you would like to tell us, something related to camels, about the **Rabaris** or **Fakiranis**? Anything about these three topics?

Paancha Bhai- The forest department causes a lot of trouble to our camels. They don't let our camels to feed on mangroves. Even because of a factory constructed there, camels have problems in going there. Near the coast, there are marine police, coast guards who also cause trouble to the camels. If a camel goes in the sea, it will come back on the third day. Sometimes the navy or the customs people catch us, it's not like we don't have proof. Now consider if there's a Fakirani jat, their appearance is very similar to Pakistani jats, that is the reason police catches them to check that terrorists don't come in our country. Our people complain about this and ask us to get a solution for this. We have seeked permission for people that we are sending.

Interviewer- Did you start writing the names down because of the problem that you are facing now or what it done earlier as well?

Paancha Bhai- Yes, My grandfather had written it down, my father had written it and now I've written it- which camels are with whom. Everybody has mobile phones now; it is easier to communicate now. Everything's written down.

Interviewer- Kharai camels are very important for Rabaris?

Paancha Bhai- Extremely. We say the kharai camels were created in the place by the god. They are very unique, you wouldn't find any camel like them anywhere in Gujarat. Go anywhere in India, you will find many camels, but you won't find any like Kharai camel. Look at it's body features, it's legs, it feels like some kid is going into the water and when it comes out, it looks like a giant camel. This is blessing of my god, Savla Pir, nobody else can make such a wonder. There were so many floods, tsunami, an earthquake; we all thought that the camels were gone, but they were right there. All of them.

Interviewer- Thank you so much for all your time, and for talking to us in such great detail.

“I bound him near some glorious tree
that he some buds might eat;
Ill-mannered camel, on the sly
still finds the salt-bush sweet.
Woe's me-I know not how to treat
Camel that so confounds.”

-Shah Latif Bhitai