Trying to make the grade in a Van Gujjar basti

by Varsha Singh

Fatima Bano was reciting a poem: “The fan rotates above, the baby sleeps below,” she said in Hindi. “Sleep baby sleep, sleep on the big red cot…” With all eyes on her, the nine-year-old was still trying to somehow not be noticed among the group of kids attending a class one afternoon in a Van Gujjar basti inside the Rajaji Tiger Reserve.

Their ‘school’ was being held that day in the front yard of Tabassum Biwi’s house. A bunch of students, ages ranging from 5 to 13, were sitting on a large durrie, a few clutching notebooks. Tabassum Biwi’s two kids, a boy and a girl, were among them; her family, like almost everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living. The school has been assembling everyone in this basti, rears buffaloes and sells milk for a living.

A band of Van Gujjar youth are their teachers. They try to fill in a persistent education gap in Kunau Chaud – a basti of around 200 families in Yamkeshwar block of Uttarakhand’s Pauri Garhwal district. The settlements that are in the tiger reserve usually consist of mud and thatch huts. Permanent construction is prohibited by the forest department, there are no toilet facilities, and water is used from forest streams.

Kunau Chaud is located inside the reserve, far from the pucca road – and schooling here remains erratic and uncommon due to several hurdles. The Government Model Primary School (till Class 5), and the Government Inter-College (till Class 12) are around three kilometres away. Wild animals like tigers, elephants and deer move about here. Reaching the schools requires wading through the shallow waters of the Bean river (a tributary of the Ganges). During the monsoon months of July and August, when the water rises, the kids either stop going to school or their parents shepherd them across this route. Monday to Friday between 9:30 a.m. and 12:30 p.m. During one of my visits here in December 2020, when Fatima Bano was reciting the poem, 11 girls and 16 boys were present.

Many are not even enrolled in school – a lack of documents restricts these attempts. Applying for and procuring official papers is a long and hard task for the Gujjar families living in remote forest bastis. Parents in Kunau Chaud say that most of their kids don’t possess birth certificates or Aadhaar cards.

In many families, the older children spend a large portion of their days watching over cattle. Among them is Zainoon Bibi’s 10-year-old son Imran Ali, who takes care of the family’s six buffaloes. Though he was enrolled in the government primary school and then admitted to Class 6 in August 2021, his education remains a challenge. “I wake up at 6 in the morning to feed the animals and then I milk them. After that I take them to drink water and then give them hay,” he says. Imran’s father sells milk and his mother looks after household activities, which include taking care of children...Continued on page 2
Breeding bulls for the public good!

By S Rajeshwaran

A bird perched on the back of a Banoo buffalo

Breeders of the India valley civilization spread across Guru Tegh Bahadur, Rajasthan and Gujarat practiced meticulous breeding practices. They bred purebred animals over many generations and thus developed many indigenous cows and buffalo breeds. Their wisdom and knowledge have been passed down for centuries, influencing the practices of dairy farmers across India, till about 50 years ago. What made them unique was their strict discipline in choosing and rearing the male breeding bull “all for the public good. This concept of a “Temple bull” as a common property resource is an embodiment of community values, a commitment of sharing with equal responsibility and accountability brought to life by the rearing of the fertile bull allocated to each village. The power and authority to select and allot the breeding bull was vested with the ruler who, in turn, relied on the experience and wisdom of animal breeders in each village who maintained highly productive and pedigreed stock. The ruler trusted these breeders because of their long-standing experience in breed development and the respect they had earned from people in their respective villages. The ruler usually reserved the right to breed male calves from the elite female animals owned by such prominent breeders. Once born, such male calves were allotted to another village for use as a breed foundation stock. The selection of the male calf was based on the mother’s productivity and the physical traits and docility of the male calf. Once the identified male calf was born, it was reared with great care and pride by the owner; so much so that they came to maturity within 18-24 months of age! They were then given to the allotted village for breeding as a temple bull, free of cost. They freely roamed in the village and guided by their keen sense of smell, the bull identified the females in estrus by the pheromone signals they emitted. Since the bull performed its duty of servicing all females in the village, each household cared for the bull and fed it small amounts of fodder.

The use of temple bulls is still prevalent in Kutch, Gujarat. Here, the breeding bulls roam freely with the female buffaloes every day of the year, 24X7! The male pheromone continuously released by the bull has a positive effect on females; such that the age at first calving is less than 24 months and the inter-calving period is around 12 months. This traditional practice has allowed breeders to successfully and quickly develop the next generation of female calves which in turn benefitted all households in a village. Thanks to such time-tested practices, India today holds one of the largest bio-diversified cow and buffalo populations in the world. 50 recognised cow breeds and 17 buffalo breeds. Each breed has been developed over hundreds if not thousands of years, keeping in mind the local context in terms of availability of resources, vegetation, crops and经济 growth, prevalent diseases, as well as the skills and aptitude of the local people. These breeding practices were also used to develop new breeds that would suit certain environments. The most recent example is the development of the Banoo buffalo breed in Kutch, Gujarat. In this area, local livestock breeders in this area had successfully developed the Kankrej cow breed and had a good experience with heifers. Unfortunately, the 1986 earthquake changed the topography of Kutch from a fertile delta river to a dry parched sands. The male Kankrej cow could not be reared in the way that had been done till then. The same animal breeders of Kutch then found that buffaloes were suitable for the difficult terrain that Kutch had turned into. Accordingly, they developed the Banoo breed from the Murrah and Mehsani breed of buffaloes brought in from the Punjab area. This is an interesting and unique case of cow breeders turning into buffalo breeders!

While breeders especially selected and bred cattle and buffalo for thousands of years, the practice of using cattle as farm labour and dung for fuel has greatly declined in the modern age. While the practice of using cattle as farm labour has all but disappeared in Tamil Nadu today, there is still a thriving dung economy. Most of the dung is sold to farmers in Kerala, who use it on their plantations. Cattle breeders around Madurai can make roughly Rs 50,000-60,000 a month from selling dung to customers in Kerala, with each bag weighing about 80 kg and priced at Rs 120.

Thozhuvam

Although pastoralists have managed to sell raw dung to farmers, Kerala farmers have not been willing to pay better prices by turning the dung into value-added products. Recognising this potential, the Management Development Institute, Patna, in association with the Government of Kerala, established the Thozhuvam Cooperative to offer farmers a platform to form co-operatives. The Thozhuvam Cooperative was formed to enhance returns for pastoralists. With cow dung directly sourced from the farmers, the organisation manufactures and markets value-added products such as dung firewood, goat dung fuel, incense sticks, dung handicrafts, and more. Their main agenda is to safeguard the rights of pastoralists across the country and then sell the milk that cattle breeds on the verge of extinction and also fight for the legal grazing rights of pastoralists.

Pastoralism in ancient Tamil literature

While modern research has largely ignored pastoralism in South India, Tamil Nadu’s rich pastoral heritage is well-documented in ancient Sangam literature, a corpus of poems written between 300 BC and 300 AD. Unlike their lower status in Tamil society today, seen as practising primitive livelihoods, pastoralists were well-respected and played important roles.

The Sangam poems separate the land into five different terrains called rithus – the Kunji, mountainous region; Mullai, forests; Marutham, copland; Neithal, seashore; and Palai, drylands. The poems vividly paint the different landscapes, describing the flora, fauna, and physical features, while distinctly characterising each region’s inhabitants and their occupations. The foothills were considered even more valuable than land, villages would celebrate successful raids with grand festivities including feasts, dancing, and beating drums.

On the verge of extinction

A survey of Halari Donkeys and its keepers in 2015 was conducted by a Blue-based NGO – Sahijoon Trust which found that there were 1132 donkeys of the breed left. The population further declined to 662 in 2020. Another survey conducted in 2022 showed that the number declined to 419 individuals in its native village! 114 Halari Donkey breeders from across the Saubharta region of Gujarat have collaborated and developed a Community-Based Organisation to address issues surrounding Halari donkey pastoralism.

Pastoralist and gothic bharti event to save threatened donkey breed

First India Bureau

In Saaurashtra, Halari donkey pastoralists organised a Gothic Bharti event to raise public awareness regarding the importance of preserving this endangered livestock breed in its native habitat. It was an initiative of the Halari Donkey Conservation Committee – a group of 11 pastoralists from Jamnagar and Dwarka Districts of Saaurashtra along with Sahijoon, Bhuj. The event commenced in Upleta Taluka, Rajkot the pasturalists from Jamnagar and Dwarka Districts of Gujarat. They Halari donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They are raised by Bharwad pastoralists who use this donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey is a pack animal to carry luggage during migration with small ruminants. This elegant donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They Halari donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They are raised by Bharwad pastoralists who use this donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They Halari donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They are raised by Bharwad pastoralists who use this donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They Halari donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat. They are raised by Bharwad pastoralists who use this donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey as a pack animal to carry luggage during migration with small ruminants. This elegant donkey is an important livestock in the semi-arid landscape of Saaurashtra, Jamnagar and Dhrubhumi Dwarka districts of Gujarat.
Talking with sheep
By Ashwini Labde

A morning in the Banni grasslands of Kachchh
By Chhani Bungsut

The sun rises above the deserted Banni grassland

Changi-dong, chang-dong.

The bells reverberated through the calm dawn as we waited for the buffaloes to come home. Forced awake at 3:30 AM, we groggily sat on plastic chairs near a herder’s shed, dozing in and out of conversation. Around 4:30 AM, the bells grew louder and clearer, the animals coming back to their owners, just like the morning before and the day after as well. I had seen Banni buffaloes in daylight before, but they looked even more majestic under the moonlight, harsh shadows replacing with a soft glow ebbing from their smooth skin.

Speaking in clicks and whistles, the Maldharis (pastoralists) who were sitting with us got up with their sticks and guided the buffaloes into the shed where calves impatiently waited for their mother’s return. Another bumpy jeep ride away, we watched from afar as women milked their buffaloes into tin cans. They had clearly mastered their sticks and guided the buffaloes into the shed. It had been like this throughout our trip. The story remains one of my fondest memories of the trip.

The road finally came to view and I thought, surely it’s time to go back to eat! But the jeep pulled up behind a fence of thorns and we made our way to a village seasonally occupied by Maldharis. I don’t remember the name of the village but could never forget their hospitality. When we made it through the thorny gate, the Maldharis immediately set up stalls for us and ordered his sons to bring us chai. The creamy, sweet chai they served in ceramic plates remains one of my fondest memories of the trip.

After a conversation with the Maldhari and his sons, where they told us of their business making sweet chai, they bid us goodbye, he again made a sound calling out to his flock. He made a certain sound again and all the sheep started walking behind him without a fuss. Wonderstruck, we silently got into our vehicle and returned home.

We often talk about the need for water in our everyday life. Without water, miracles cannot take place in the desert. Even when a miracle does occur, the absence of water erases it, transforming it into mere illusion. Without water, the whole world becomes a fantasy. What good is it to have your health back if you lack water? Life draws near, but so does death.”

Sheep

Communities that live with animals can understand such languages, and communicate with their animals through secret codes and sounds. From subtle differences between the sounds of the animals, they can easily tell if something is wrong with their animals, or if they are hungry, thirsty, or sick.

Gold Dust
A tale of the deep bonds between man, animal, and nature.

Review by M.A. Orthofer

Gold Dust is the story of Ukhayyad, a Tuareg Saharan nomad whose closest companion remains always the pairhul Mahali camel – a noble thoroughbred – that he receives when he reaches manhood and that is his pride and joy. With a will of its own “– Camels do not forget wrongs” – the remarkable beast is also a source of embarrassment and humiliation, but Ukhayyad remains true to the animal, and he to him.

Ukhayyad marries and has a son, and when times grow desperate he succumbs and pawns his camel, thinking he would be able to redeem him soon enough. The two are certainly meant to be together, with the camel repeatedly escaping his new master and returning to Ukhayyad. Eventually, the new owner offers a devil’s pact that would allow them to be reunited, and Ukhayyad ultimately gives in, destroying the life he had built for himself and leaving him on the run with his beloved companion.

Al-Koni’s story is no romantic man-and-animal tale, but the deep bonds between man, animal, and nature are beautifully presented here. Where significant figures as Ukhayyad's father, wife, and son remain almost completely unknown. Overriding passions easily drown out almost everything else, and few exchanges are in any way revealing (indeed, there are few real verbal exchanges and practically nothing that amounts to a conversation), it’s not surprising that a Moslem holy book is also a lifetime with animals.

Ukhayyad fails, of course, in his connections with other people: he proves not to really be a part of his tribe, and even marriage proves only to be a temporarily stabilizing force. He can not fully embrace this sort of life, only finding himself truly happy when he is with his camel, and generally when he is alone with it in the wild desert outdoors. For Ukhayyad, “The prize was in the pure presence of God that can be found only in the quiet emptiness of infinite wilderness.”

Saharan life is also very well evoked in Gold Dust – again, less that of community, but of man (and beast) against the elements. So also, especially, its hardships:

Character-development is certainly not Al-Koni’s strongest: even the characters who dominate the narrative remain cyphers, and even such
Camels of Kachchh in custody - ships of the deserted
by Jaideep Hardikar

Maharashtra police detained 58 camels and five traditional herders from Kachchh on January 7 suspecting these semi-nomadic pastoralists were smuggling camels to slaughterhouses in Hyderabad. The herders were horrified at having been arrested for simply herding camels. “We never sell our female camels, and use our male camels for transportation,” Mashrubhai Rabari, a veteran community leader who lives in Wardha district, told us. “Camels are our feet.”

After being detained for a month, the camels were finally released with conditions for the herders to report their location to the police every Sunday. The following images from Jaideep Hardikar tell us the story of their arrest.

The extended article can be found on PARI - https://ruralindiaonline.org/en/articles/kachchh-camels-custody-ships-of-the-deserted/
Pastoral Times, 11th Edition

Rabaris from Chhattisgarh and other places camped in an open shed at the gauraksha kendra in Amravati while waiting for the camels to be freed.

A narrow chest, single hump, and a long, curved neck, as well as long hairs on the hump, shoulders and throat, are the characteristic features of the Kachchhi breed.

A Rabari climbs a neem tree on the premises to cut its branches for leaves, to feed the captive camels.

Separated from their herders, the animals languished in the cow shelter, in the custody of people quite clueless when it comes to caring for and feeding them. Eating cattle fodder at the cow shelter.

"The charge against us is that we treated them cruelly. But there is no greater cruelty than keeping them confined here when they need open grazing."

- Parbat Rabari, veteran camel keeper from Nagpur.
Meet the beauty queens of Al Dhafra
by Kiki Streitberger

The aims of the festival are to celebrate Bedouin culture, generate tourism and preserve the purity of certain camel breeds.

“I had just arrived at the Al Dhafra Festival, and young boys in kanduras, or long tunics, were running toward my car, shouting as they pointed their index fingers in the air. In the distance, two men rode camels, each pulling another of the animals on a leash. One of the camels was draped in a gold-tasselled winner’s blanket. Behind the men, slowly making its way across the sand dunes, was a large convoy of hooking pickup trucks. Men and boys stood in the beds of the vehicles and leaned out of all the windows, waving and cheering, many of them filming the scene on their phones. Without a second thought, I left my little rental car behind and jumped on the back of the nearest pickup. I wanted to be part of this impromptu celebration.

The annual Al Dhafra Festival celebrates Bedouin traditions, and takes place at the edge of the Rub al Khali, or the Empty Quarter, considered the largest sand desert in the world, near the Emirati city of Madinat Zayed, a two-hour drive southwest of Abu Dhabi. Highlights of the gathering include Saluki races (the dogs are prized by the Bedouin because of their speed and eyesight), poetry readings and exhibitions on falconry and traditional artisanship. From fresh dates to camel milk, there’s also an array of food and drink.

At the heart of the festival, however, are the camel beauty contests. During the weeklong event, Al Dhafra is the epicenter of the camel universe. In 2019, the year I attended, more than 24,000 camels from all over the Middle East competed for 60 million Emirati dirhams in prize money — the equivalent of more than $16 million. Vast sums of money also change hands as particularly beautiful camels are sold.

Some participants trace the origins of the beauty contest to a family dispute in 1993, when two camel breeders had to call on some independent judges to determine whose animals were more beautiful. Since then, camel beauty contests have evolved into a multimillion-dollar industry, with state-sponsored heritage festivals held all across the country.

Invited to celebrate one of their camel’s wins, I joined the men of the Almuharrami family into their illuminated tent, following Waheela, a beauty queen. “She has just been crowned the most beautiful young camel in the Middle East,” said Munafia, her 12-year-old owner, beaming into their illuminated tent, following Waheela, a beauty queen. “She has just been crowned the most beautiful young camel in the Middle East,” said Munafia, her 12-year-old owner, beaming. And then the music began, and the men lifted their bamboo canes to perform the yawlah. During the traditional stick dance, men chanted poetry and simulated a battle scene. By the time I left the party, the sky had turned inkily black, with the reedy last light deep into the night.


Food

Pastoral Cheesemaking -
One of the earliest stories of milk preservation
By Namrata Sundaresan

Cheesemaking thus became the form of milk preservation, nutrient-dense food that could last months and carried as groups of settlements migrated. People from the earliest cheesemaking cultures migrated through the Balkans and the southern Mediterranean and on into Northern Europe and went west into Egypt and later from North Africa to France’s Loire Valley.

These nomadic cheesemaking traditions also went east into India. The Vedas include references to making acid-coagulated cheeses as well as using plants to help coagulate milk into cheese—some of the earliest uses of plant rennet we have on record. While acid coagulated yoghurt and fresh cheeses like paneer flourished in India, the maturation of cheese as hard cheese never gained purity in the Vedas that may have prevented the use of rennet, sourced from animals.

A study published in 2020 presents what could be the earliest evidence of cheese-making in South Asia. The study, led by Kalyan Sekhar Chakraborty, a researcher at the University of Toronto Mississauga, is based on archaeological finds from the Kottada Bhadli settlement, located in modern day-Gujarat’s Kutch district, which was an agro-pastoral settlement in the Indus Valley civilization, occupied between 2300 and 1950 BCE.

Over the years, especially in India, cheese is synonymous with processed slices, slices made on an industrial scale. The last decade has seen a wave of handmade artisan food products gaining much-needed visibility. Cheese has been one of them.

Small batch producers across the country are now vying for shelf space with processed and imported cheese with their locally made and handcrafted cheeses. Modern urban cheesemakers though have their own challenge in their quest for a clean and healthy product. Pastoral communities on the other hand have a challenge of bountiful supply and no tangible form of milk preservation or value-added products.

The solution and the bridge between the two perhaps are in Pastoral Cheesemaking, a traditional form of preservation, value-added product to a new modern context for the urban consumer.

Käse works with a variety of locally sourced ethical milk around the country and makes over 30 kinds of cheese

Camel No. 1! Camel No. 1!

So how was the first batch of cheese made and who made it?

Cheese may have been discovered accidentally by the practice of storing milk in containers made from the stomachs of animals. Stories have been told about a shepherd boy who carried milk in a container like this. Grazing his flock of sheep he settled down to drink some milk which had been transformed into a clear liquid with solid floating on top. Rennet, the enzyme used to make cheese, is naturally present in a clear liquid with solid floating on top. Rennet, the enzyme used to make cheese, is naturally present in

The ideal camel has long straight legs, a long neck, triangles of the Middle East competed for 60 million Emirati dirhams in prize money — the equivalent of more than $16 million. Vast sums of money also change hands as particularly beautiful camels are sold.

The annual Al Dhafra Festival celebrates Bedouin traditions, and takes place at the edge of the Rub al Khali, or the Empty Quarter, considered the largest sand desert in the world, near the Emirati city of Madinat Zayed, a two-hour drive southwest of Abu Dhabi. Highlights of the gathering include Saluki races (the dogs are prized by the Bedouin because of their speed and eyesight), poetry readings and exhibitions on falconry and traditional artisanship. From fresh dates to camel milk, there’s also an array of food and drink.

At the heart of the festival, however, are the camel beauty contests. During the weeklong event, Al Dhafra is the epicenter of the camel universe. In 2019, the year I attended, more than 24,000 camels from all over the Middle East competed for 60 million Emirati dirhams in prize money — the equivalent of more than $16 million. Vast sums of money also change hands as particularly beautiful camels are sold.

Some participants trace the origins of the beauty contest to a family dispute in 1993, when two camel breeders had to call on some independent judges to determine whose animals were more beautiful. Since then, camel beauty contests have evolved into a multimillion-dollar industry, with state-sponsored heritage festivals held all across the country.

Invited to celebrate one of their camel’s wins, I joined the men of the Almuharrami family into their illuminated tent, following Waheela, a beauty queen. “She has just been crowned the most beautiful young camel in the Middle East,” said Munafia, her 12-year-old owner, beaming. And then the music began, and the men lifted their bamboo canes to perform the yawlah. During the traditional stick dance, men chanted poetry and simulated a battle scene. By the time I left the party, the sky had turned inkily black, with the reedy last light deep into the night.


Food

Pastoral Cheesemaking -
One of the earliest stories of milk preservation
By Namrata Sundaresan

Cheesemaking thus became the form of milk preservation, nutrient-dense food that could last months and carried as groups of settlements migrated. People from the earliest cheesemaking cultures migrated through the Balkans and the southern Mediterranean and on into Northern Europe and went west into Egypt and later from North Africa to France’s Loire Valley.

These nomadic cheesemaking traditions also went east into India. The Vedas include references to making acid-coagulated cheeses as well as using plants to help coagulate milk into cheese—some of the earliest uses of plant rennet we have on record. While acid coagulated yoghurt and fresh cheeses like paneer flourished in India, the maturation of cheese as hard cheese never gained purity in the Vedas that may have prevented the use of rennet, sourced from animals.

A study published in 2020 presents what could be the earliest evidence of cheese-making in South Asia. The study, led by Kalyan Sekhar Chakraborty, a researcher at the University of Toronto Mississauga, is based on archaeological finds from the Kottada Bhadli settlement, located in modern day-Gujarat’s Kutch district, which was an agro-pastoral settlement in the Indus Valley civilization, occupied between 2300 and 1950 BCE.

Over the years, especially in India, cheese is synonymous with processed slices, slices made on an industrial scale. The last decade has seen a wave of handmade artisan food products gaining much-needed visibility. Cheese has been one of them.

Small batch producers across the country are now vying for shelf space with processed and imported cheese with their locally made and handcrafted cheeses. Modern urban cheesemakers though have their own challenge in their quest for a clean and healthy product. Pastoral communities on the other hand have a challenge of bountiful supply and no tangible form of milk preservation or value-added products.

The solution and the bridge between the two perhaps are in Pastoral Cheesemaking, a traditional form of preservation, value-added product to a new modern context for the urban consumer.

Käse works with a variety of locally sourced ethical milk around the country and makes over 30 kinds of cheese

Camel No. 1! Camel No. 1!

So how was the first batch of cheese made and who made it?

Cheese may have been discovered accidentally by the practice of storing milk in containers made from the stomachs of animals. Stories have been told about a shepherd boy who carried milk in a container like this. Grazing his flock of sheep he settled down to drink some milk which had been transformed into a clear liquid with solid floating on top. Rennet, the enzyme used to make cheese, is naturally present in

The ideal camel has long straight legs, a long neck,
The world’s oldest pants stitched together cultures from across Asia

Move over, Versace. These 3,000-year-old pants were stylish, functional and multicultural

by Bruce Bower

What little rain that falls on a gravelly desert located in western China’s Tarim Basin evaporates as it hits the blistering turf. Here, in this parched wasteland, lie the ancient remains of people who made one of the biggest fashion statements of all time.

Herders and horse riders who buried their dead in the Tarim Basin’s Yanghai graveyard pioneered pants making roughly 3,200 and 3,000 years ago. Their deft combination of weaving techniques and decorative patterns — displaying influences from societies across Eurasia — yielded a pair of stylish yet durable trousers now recognized as the oldest such garment known in the world.

Now, an international team of archaeologists, fashion designers, grossists, scientists, chemists and conservators has untangled how those trousers were made and painstakingly created a modern replica. The vintage slacks weave a tale not only of textile innovation but also of how cultural practices fanned out across Asia, the researchers report in the March Archaeological Research in Asia.

Fashion icon

One man brought the pants to scientists’ attention without uttering a word. His naturally mummified body, as well as the preserved bodies of more than 50 others, was uncovered during excavations conducted by Chinese archaeologists since the early 1970s at the Yanghai cemetery.

Researchers now call him Turfan Man because the Yanghai site lies about 43 kilometers southeast of the Chinese city of Turfan.

Of all of Turfan Man’s garments, his trousers stood out as truly special. Not only were they older by at least several centuries than any other examples of such gear, but the Yanghai pants also boasted a sophisticated, modern look. The pants feature two leg pieces that gradually widen at the top, connected by a crotch piece that widens and bunches in the middle to increase leg mobility.

Within a few hundred years, mobile groups across Eurasia began wearing pants like those at Yanghai, other archaeological finds have shown. Woven leg covers connected by a flexible crotch piece eased the strain of riding horses bareback over long distances. Not surprisingly, mounted armies debuted around that time.

Today, people everywhere don denim jeans and dresses shaped like trousers. But how did this design pan out across much of ancient Asia, Wagner and her colleagues suspect.

For instance, the interlocking T pattern that Turfan Man’s trousers sport also appears on bronze vessels found in what’s now China from around the same time, roughly 3,300 years ago, Wagner’s team says. The nearly simultaneous adoption of this geometric form in Central and East Asia coincides with the arrival of herders from Western Asian grasslands riding horses that they domesticated 4,200 years ago or more.

Pottery found at those horse riders’ home sites in western Siberia and Kazakhstan displays interlocking T’s as well. Any deeper meaning this pattern held aside from its artistic appeal remains unknown. But West Eurasian horse herders probably spread this interlocking T design across much of ancient Asia, Wagner and her colleagues suspect.

Similarly, a stepped pyramid pattern woven into the Yanghai pants appears on pottery from Central Asia’s Pekiurka culture, which dates to between around 3,900 and 3,750 years ago. The same pattern resembles architectural designs that are roughly 4,000 years old from Central and Southwestern Asian and Middle Eastern societies, including Mesopotamian stepped pyramids, the researchers say. Fabric weaving such as that observed on Turfan Man’s trousers also originated in those societies.

This pair of approximately 3,000-year-old pants, the oldest ever found, displays weaving techniques and decorative patterns that were influenced by cultures across Asia, researchers say.

A peek into the pasture:
A film review of The Cave of the Yellow Dog

Pastoral Times, 11th Edition

By Prajakta Kulkarni

The Cave of the Yellow Dog opens up a window into the life of a nomad family living and moving through much of Europe and Asia around 5,000 years ago. By around 2,000 years ago, herders’ migration paths formed part of a trade and travel network running from China to Europe that became known as the Silk Road. Cultural mingling intensified as thousands of local routes throughout Eurasia formed a massive network.

Turfan Man’s multicultural riding pants show that even in the Silk Road’s early stages, migrating herders carried new ideas and practices to distant communities. “The Yanghai pants are an entry point for examining how the Silk Road transformed the world,” Frachetti says.

The full version can be found on Science News: https://www.sciencenews.org/article/pants-oldest-ancient-humanasia-culture-origin

Always trust the mother

Story told by Narendra Bomma, a Lingayat elder from Bargur Hills, Tamil Nadu

Bargur cattle with their herders

PC: Shouryamoy Das

PC: M. Wagner et al/Archaeological Research in Asia 2022

“Go to the earth and serve the humans,” the goddess Parvathi told the cow. But there was no one to take care of the angry cow on earth, and she roamed alone for ages. One day, on a day that seemed like any other, she met a human, one that promised to care for her and adorn her with accessories. So the story went — the Gollas tamed the cow and became the first herders in the world. Staying true to their promise, they decorated the cow’s horns, put a ring through her nose and tied bells around her neck, showering her with praisers of her beauty.

One cow became several hundred, and the Gollas travelled across seven hills to graze the cows. On one occasion, the last cow that was grazing had a calf waiting for her in the pen. As she started her journey back home, a tiger caught hold of her and tried to eat her. Before the tiger could manage a bite, she calmly told him, “Fat me tomorrow, I’ll give milk to my calf and return at daybreak.” “How can I trust you?” the tiger asked him. The cow swore on the sky, water and land that she would return the next morning, the cow bathed herself so that she was clean for the tiger. She then set off to find him.

Upon seeing that the cow had returned, the tiger was shocked. “How can I eat a cow with so much Bhakti, so much devotion?” he asked himself. He let her go. When she returned to her pen, the calf refused to drink her milk. The cow thought that she had lied and did not go to the tiger, suspecting that she did not keep her word. Keeping in the calf’s trust, she fed the cow until all calves that they should be separated from their mothers after birth. To this day, this is why calves are sold off at such a young age.

The Cave of the Yellow Dog opens up a window into the life of a nomad family living and moving through much of Europe and Asia around 5,000 years ago. By around 2,000 years ago, herders’ migration paths formed part of a trade and travel network running from China to Europe that became known as the Silk Road. Cultural mingling intensified as thousands of local routes throughout Eurasia formed a massive network.

Turfan Man’s multicultural riding pants show that even in the Silk Road’s early stages, migrating herders carried new ideas and practices to distant communities. “The Yanghai pants are an entry point for examining how the Silk Road transformed the world,” Frachetti says.

The full version can be found on Science News: https://www.sciencenews.org/article/pants-oldest-ancient-humanasia-culture-origin

Always trust the mother

Story told by Narendra Bomma, a Lingayat elder from Bargur Hills, Tamil Nadu

Bargur cattle with their herders

PC: Shouryamoy Das

PC: M. Wagner et al/Archaeological Research in Asia 2022

“Go to the earth and serve the humans,” the goddess Parvathi told the cow. But there was no one to take care of the angry cow on earth, and she roamed alone for ages. One day, on a day that seemed like any other, she met a human, one that promised to care for her and adorn her with accessories. So the story went — the Gollas tamed the cow and became the first herders in the world. Staying true to their promise, they decorated the cow’s horns, put a ring through her nose and tied bells around her neck, showering her with praisers of her beauty.

One cow became several hundred, and the Gollas travelled across seven hills to graze the cows. On one occasion, the last cow that was grazing had a calf waiting for her in the pen. As she started her journey back home, a tiger caught hold of her and tried to eat her. Before the tiger could manage a bite, she calmly told him, “Fat me tomorrow, I’ll give milk to my calf and return at daybreak.” “How can I trust you?” the tiger asked him. The cow swore on the sky, water and land that she would return the next morning, the cow bathed herself so that she was clean for the tiger. She then set off to find him.

Upon seeing that the cow had returned, the tiger was shocked. “How can I eat a cow with so much Bhakti, so much devotion?” he asked himself. He let her go. When she returned to her pen, the calf refused to drink her milk. The cow thought that she had lied and did not go to the tiger, suspecting that she did not keep her word. Keeping in the calf’s trust, she fed the cow until all calves that they should be separated from their mothers after birth. To this day, this is why calves are sold off at such a young age.
Farmershose from desioon  
by Snigdha Ahuja  

“What was supposed to be a beautiful story of the pastoral community making blankets and selling them for income has reached a stage where they don’t even care to shear their sheep because the cost is much more than the value they get for the product,” says Santosho Kocherlakota. He is the Hyderabad-based co-founder of footwear label Earthen Tunes who participated in an online exhibition in February to sell indigenous wool products as part of the Desi Oon Hub.

Earthen Tunes, which was founded in 2019 and is being incubated by the Rural Technology and Business Incubator at IIT-Madras, has design innovation at the centre of its product. The brand is focused on creating functional footwear for farmers that they can wear while at work. Crafted from Deccani Gongadi blankets, these shoes are thermoregulated, water-resistant and lab-tested for durability and fit. The blankets are made of Deccani wool sourced dominantly from the Kurnub, Kurama and Dhangar tribes of the region.

Pastoral communities have been weaving wool into blankets for a long time. These blankets are woven on the earliest forms of pit loom, making them carpet grade. But those who have used traditional Gongadi or Kambali blankets would be aware that they can typically last for up to 20 years and that the natural fibres become softer as you keep using them,” explains Kocherlakota, who is a graduate of the National Institute of Design. These blankets are an integral part of the shepherd’s attire and protect from the harsh weather conditions throughout the year. These properties make desi wool an ideal material for use in making footwear for Indian conditions, particularly for farmers who deal with varying climates and soil conditions. After carrying out extensive field research, prototyping and testing, Santosho’s team was able to design and manufacture a shoe made from locally sourced desi wood.

Despite the useful properties of desi wool blankets, the craft of making them is on the verge of extinction. The decrease in demand for wool blankets and the rearing of meat-based breeds over wool-based breeds has led to a sharp decline in the number of weavers involved in this craft. “We believe our shoes could be a way to revive the demand for this wool and help resurrect the desi wool economy again.”

https://socialdesignlibrary.in/earthen-tunes/

In one scene, Nansal stacks dried dung to recreate the simple and sustainable life that they live, bereft of excessive consumption. Before we know it, the picture of their quaint house folded and packed on carts, we see all that is left is a patch of bare land. Now that we see their house folded and packed on carts, we see that they leave almost nothing behind. A nod to how pastoral communities today, who wish to keep up with the ever-changing society. Layer by layer they peel their yurt, a round tent that serves as a temporary house, down to its bones.

The Batchuluun family, a world where stagnancy doesn’t exist and hope is always around the corner. In times of fast forward, the Cave of the Yellow Dog opens up a world of possibilities for the viewer - a world where stagnancy doesn’t exist and hope is always around the corner. In times of fast forward, the Cave of the Yellow Dog opens up a world of possibilities for the viewer - a world where stagnancy doesn’t exist and hope is always around the corner.

In a short span of time, the Cave of the Yellow Dog opens up a world of possibilities for the viewer - a world where stagnancy doesn’t exist and hope is always around the corner. In times of fast forward, the Cave of the Yellow Dog opens up a world of possibilities for the viewer - a world where stagnancy doesn’t exist and hope is always around the corner.

Ever wondered how many breeds in India are raised in pastoral systems? Even if you didn’t, we’re here to tell you. Research conducted by the Centre for Pastoralism found that 73 of the 197 breeds in the country are managed by pastoralists, including cattle, camel, donkey, horse, and yak breeds! How many of these indigenous Indian breeds can you find in the word puzzle below?

Breeds Word Hunt

Pastoral Breeds of India

Ever wondered how many breeds in India are raised in pastoral systems? Even if you didn’t, we’re here to tell you. Research conducted by the Centre for Pastoralism found that 73 of the 197 breeds in the country are managed by pastoralists, including cattle, camel, donkey, horse, and yak breeds! How many of these indigenous Indian breeds can you find in the word puzzle below?

| EAI AMENHI IIAI LRC | IRJ ALORIRHLLTA | MRPLIATAAOAGCA | HIHLIIKURHINN | RNWPRRAHILIAL | RIAAASAOLRHNINO | KCRRMNNAMIANT G | NTIANAAARLRTK | EERJWARICAOAHA | IARAHKAIMHRKAH | RCMAUTMLUILTNM | IHRIRHEAIHIAAGI | AMAU TriRRITHIHIA | ATISRIEROLLENK |

CLUES:

1. Cattle with widespread horns, kept by the Raika/ Rabari of Sirohi and Pali districts of Rajasthan
2. Sheep and goat breed, native to the Leh district of Ladakh
3. Swimming camel breed native to Kutch, Gujarat
4. Reddish brown and black goat breed reared by Bharwad and Rabari communities
5. Sheep breed reared solely for meat, found in Andhra Pradesh
6. Name for sheep, goat, and camel breeds reared in the districts that once constituted the Marwar kingdom
7. Swamp buffaloes raised in Assam
8. A multipurpose camel breed used for milk production, tourism, riding and safaris in Rajasthan, it does not have the ‘sheepra’ - a common feature of desert camels
9. White in colour, this donkey is large and strongly built, bred in Gujarat
10. A breed of horses native to Kinnaur and the Lahaul-Spiti regions of Himachal Pradesh

FASHION | 8

In one scene, Nansal stacks dried dung to recreate her memory of city buildings and proclamations. “I will live on the top floor of this stack one day!”

Towards the end of the film, we see the Batchuluun family packing up their lives on wooden carts. As they prepare to leave, Nansal’s parents discuss leaving her at a relative’s house so she can continue her education. It is a poignant glimpse into the lives of pastoral communities today, who wish to find a balance between upholding their culture and keeping up with the ever-changing society. Layer by layer they peel their yurt, a round tent that serves as a temporary house, down to its bones. Before we know it, the picture of their quaint home that we’ve grown used to seeing is gone and all that is left is a patch of bare land. Now that we see their house folded and packed on carts, we see that they leave almost nothing behind. A nod to how pastoral communities today, who wish to keep up with the ever-changing society.