



Cow Universe



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Only when speech turns into action, there is some respect for that talk. It brings us great pleasure to see our talks blooming into action. Right from the time "Kamadugha" project started, we emphasized that for the "Save Cow" campaign to be self-motivated, it is very important that efforts be economically viable. Only then results can manifest in the plane of reality and not be limited to an emotional plane.

In that effort, as a first step we concentrated on the emotional part of it. Go Yatra, Vishwa Gou Sammelana, Koti Neerajana followed as emotional expressions and were hugely successful. In all those events we reminded ourselves of one thought "Huge gatherings are like rain. But they should not end as the rain ends with every season. They must flow like the river throughout the year. For such a thing to happen, "Save Cow" should not remain a mere campaign, but it has to take the form of work, concrete and constructive work. Unless that happens, these events are not worth a penny. They just disappear as one in a thousand."

With the same enthusiasm, Dharwad district was announced as the "Haven for Cows". Slowly a Cow based industry has started to bloom in the district. This beginning is showing signs of a great promise for future. We all know that, a few days ago there was a huge gathering in "Shree Kshetra Gokarna" where we took an oath for rejuvenation of the holy place. We are not sure if that was brought to all your attention. But in the same gathering, we installed another milestone in our campaign, the release of "Gouganga Floor Cleaner". This floor cleaner is prepared from the urine of indigenous cow breeds. Priced at less than half of the price of floor cleaners in the market, it is proven that effect of "Gouganga" is double the effect of those. It is no doubt that this product will open the doors to prosperity for not only the residents of Dharwad but also of the whole state. In the words of the owners of Vibhava Chemicals, Hubli, who have come forward to produce this, "Right now there is 50% of cow's urine in the product. But soon we are planning to increase it to 80% after research. In the beginning, the company shall buy 1000 litres of urine per day and in a phased manner increased it to 1,00,000 litres maximum on a per day basis. By the way, this will not harm even when consumed by mistake, as pepsi or coke does." The qualities of cow's urine are endless.

This is just one of the several possible products such as soap, shampoo, body lotion, after shaving lotion, toothpowder, oil, balms, and other products from cow's urine. Also, there are several products of medicinal value waiting to be made from cow dung, cow's milk, curd and ghee. This "Gouganga Floor Cleaner" has only motivated to pursue this dream with much more enthusiasm and zeal. This hope has led to the gathering of people in Dharwad district under one cause without discrimination. Get ready and be a part of such a revolution that shall live beyond centuries.

- His Holiness Sri Sri Raghaveshwara Bharathee Mahaswamiji

Cow Insight Khillari

Origin

There is every reason to believe that the Khillari breed, with its several varieties, owes its origin to the Hillikar breed of cattle from Mysore State. Unlike some of the other breeds of cattle in India, it does not take its name from a geographical area. Khillar means a herd of cattle, while Khillari means belonging to Khillar; hence the herdsman is known as Khillari; in the Satpura range of hills, he is known as Thillari. There is a special tribe of professional cattle breeders in this region known as Thillaris.



In the southern Mahratta States and the districts of Sholapur and Satara the Khillaris are bred by cultivators. In these regions the size of the herd is small, usually not more than one or two cows. In the Satpura ranges the Khillaris are bred by professional breeders known as Thillaris.

Characteristics

The typical Khillari animal is compact and tight skinned, with clean cut features. The whole appearance is like a compact cylinder with stout, strongly set limbs. There is a slight rise in the level of the back towards the pelvis. The ribs are well sprung and give the trunk a barrel shape. The hindquarters are squarely developed and the coup is well-moulded. The gait of the Khillari is quick and spirited.

The forehead in Khillaris is long and narrow with a gradual convex bulge backwards toward the horns. A distinct groove runs in the center of the forehead form the nasal bridge to the center of the poll. The face is lean and long with smooth, tightly drawn skin. The nasal bridge is sharp and prominent. The muzzle is frequently mottled in color, a pink muzzle is not like by some breeders. Eyes are set in elongated fashion and are rather small, though

prominent and often a little bulging; thick, wavy skin folds around the eyes give them a dull appearance and not often liked. Ears are small, pointed and always held sideways. The ears are pale yellow colored inside. Horns are long and pointed and follow the backward curve of the forehead. There are place close together at the root and grow backwards for half the length and then turn upwards in a smooth bow shape peculiar to this breed. The horns are thick at the base and taper to a fine point. Black colored horns are preferred though pink colored horns are frequently seen, especially in Tapti Khillaris.

The neck is rather short. The dewlap is light with very little fold. The hump in males is firm fleshed and of moderate size. The shoulders are tightly muscled, well set in and merge smoothly with the cylindrical shape of the body. The legs are clean cut, round and straight. The hooves are black with digits closely set. The base of the hoof is small. The barrel is cylindrical. The lines of the back and belly are observed to be almost parallel. The navel flap, as well as the sheath, is tight and close to the abdomen. Hindquarters are well muscled. The tail is just touching the hock joint. The skin is soft and pliable though tightly drawn over the body. The hairs are fine, short and gloss

Home Tract: Bijapur districts of Karnataka and Solapur of Maharastra.

Type Draught: Known for its draught endurance

Colour: Greyish white, Males- fore and hind quarters are black. Gray white molted marking on face. Tapti Khillari - white with caroty nose and hooves new. Born calves red pull but disapperce within 2 months.

Forehead: Narrow, long, convex bilge towards horns, distinct groove from nose to poll.

Horns: Long, pointed, close at the root, bow shaped

Ears: Small held sideways.

Hooves: Closely set, black.

Tail: Black switch. Indian cattle

Electricity from what cows leave behind

FOR years, the cows at Green Mountain Dairy here produced only milk and manure. But recently they have generated something else: electricity.

The farm is part of a growing alternative energy program that converts the methane gas from cow manure into electricity that is sold to the power utility's grid.

Central Vermont Public Service, which supplies electricity to 158,000 customers around the state, was among the first utilities in the country to draw electricity from cow manure on dairy farms. About 4,000 utility customers participate by agreeing to pay a premium for the electricity. "We realized we could help meet a customer demand for renewables, help solve a manure management problem and make these farmers more financially secure," said Steve Costello, a spokesman for Central Vermont Public Service.



Four Vermont dairy farms are producing electricity for the utility, and two more are expected to be online by year's end, Mr. Costello said. The utility hopes to add six more farms by 2010.

Residents and businesses that get their electricity from the program pay a premium of 4 cents a kilowatt hour above the typical rate of 12.5 cents. Most of that money goes to the farmers, who must purchase their own equipment, which can run up to \$2 million per farm. Most farmers expect to make back their investment in 7 to 10 years.

The brothers who own Green Mountain Dairy, Bill and Brian Rowell, were looking to squeeze more profit from their farm, where they have 1,050 cows and have

begun acquiring 600 heifers. Milk prices had dipped and they wanted another source of income.

They also thought that the huge amount of waste their cows produced could be used for something other than fertilizer. So they decided to give electricity a try, armed with about \$750,000 in federal, state and utility company grants.

"We saw this as an economic and environmental management tool," Bill Rowell said. "It's helped to diversify our farm," which was named the 2008 Vermont Dairy Farm of the Year.

The Rowells' cows live in a barn where a mechanical scraper sweeps the animals' waste into a large drain. The waste is then pumped into a huge sealed concrete tank known as a digester, which holds 21 days' worth of waste and is kept at a temperature of 101 degrees Fahrenheit. Anaerobic bacteria break down the organic matter in the waste, producing a mix of methane and other gases, known as bio-gas. The gas is burned in an engine that runs an electrical generator.

The cow waste produces 250 to 300 kilowatts of electricity daily, enough to power 300 to 350 homes, according to the utility.

"We're making a resource out of a waste stream," said Bill Rowell, who is running for the State Senate.

In return, the Rowells receive a payment based on the wholesale cost of power, which averages about 7 cents per kilowatt hour, plus the 4-cent premium. Mr. Rowell said they earned about \$200,000 from electricity annually, and with the additional cows should receive \$235,000 to \$240,000 in revenue from electricity.

The Rowells are also transforming commercial waste. The farm processes about 500,000 gallons of waste and outdated ice cream from Ben & Jerry's each year and puts it in the digester. The free ice cream, which the company drops off, helps the Rowells generate more electricity and saves Ben & Jerry's the cost of disposing of it. "We're improving our processes, and they're improving theirs," Mr. Rowell said.

The digester produces more than electricity. After 21 days, the waste is pumped through a separator, which siphons off the liquid into a silo and drops the solids into a barn.

The liquid manure is used as fertilizer, while the solids are used for cow bedding. The bedding saves the Rowells thousands of dollars a month on sawdust, and they sell the excess to garden stores.



Other utilities across the country are purchasing power from farms as part of their renewable energy portfolios. Some, like Central Vermont Public Service, charge their customers a premium, while others do not.

Alliant Energy, which supplies electricity to rural customers in Wisconsin, Iowa and Minnesota, draws power from four digesters and is working to add more. About 20 independent farms in Wisconsin have digesters and sell electricity to various utilities, said William A. Johnson, manager of biofuels development at the utility.

"Our economy is agriculture, and people recognize that supporting the industry is a positive," Mr. Johnson said. The utility charges 2 cents a kilowatt hour more for cow power.

"Rural customers, in particular, are very excited that something that is considered by some to be a liability, manure, has become, in essence, a resource," Mr. Johnson said.

In Ohio, Buckeye Power went online with a digester at the end of August and plans to turn waste from a chicken farm into electricity next year.

"We were interested in finding a type of green power that was, No. 1, not intermittent, like wind or solar," said Steve Oden, a spokesman for Buckeye, which will not charge extra for the power.

Marie Audet's family farm in Bridport, Vt., was the first in the Central Vermont system and went online in 2005. The family invested \$1.3 million and expects to make that back in four years.

"We're saving money by not using sawdust, reducing original waste by recycling and generating revenue by selling electricity into the grid," Ms. Audet said.

And many customers here have chosen to pay more for power that is both renewable and supports local farmers.

Maggie Hatch, who owns the Newbury Village Store in Newbury, Vt., operates half of the business with cow power. The renewable power adds \$200 to \$400 a month to the store's electric bill, but Ms. Hatch and her husband, Gary, say it is worth it.

"It's worth it to us to spend that money to help the producers and use power that helps sustain the environment," Ms. Hatch said. "When you live in a place like we do, which is a beautiful part of the country, you're really aware of the environment and want to keep it that way."

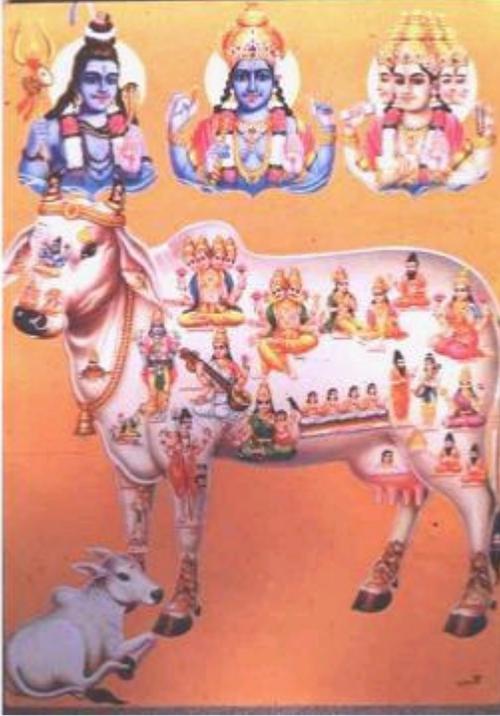
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Cow & Hindu Mythology

Kamadhenu, the sacred cow which grants all wishes and desires, is an integral part of Hindu mythology. This divine cow, which lives in swargalok (heaven), emerged from the ocean of milk (ksheerasagar) at the time of samudramanathan (the great churning of the ocean by the gods (suras) and gemons (asuras). It was presented to the seven sages by the Gods, and in course of time came into the possession of Sage Vasishtha.

Kamadhenu's complexion is like the white clouds. Every part of cow's body has a religious significance. Its four legs symbolize the four Vedas, and its teats the four Purusharthas. Its horns symbolize the gods, its face the sun and the moon, its shoulders Agni (the god of fire), and its legs the Himalayas.



Kamadhenu is also well-known through its other five forms: Nanda, Sunanda, Surabhi, Susheela and Sumana.

Protecting cows, Serving cows:
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Mythologically, Brahma (the creator) created the brahmins (priests) and the cow at the same time, the Brahmins were to recite the religious scriptures while the cow was to afford ghee (clarified butter) for offerings in religious sacrifices. Brahma also affirmed it to be the mother of gods, ought to be worshipped and anybody who killed a cow or allows another to kill it, was deemed to rot in hell, for as many years as there are hair upon his body.

The cow symbolizes the dharma itself. It is said to have stood steadily upon the earth with its four feet during the Satyug (world's first age of truth), upon three feet during the Tretayug (the second stage of less than perfection), upon two feet during the Dwaparyug (the third stage of dwindling and disappearing perfection) and only on one leg during Kaliyug (the fourth and current age of decadence).