

Preservation of India's local livestock germplasm: Vechur Cattle

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In many developing regions, local breeds often are not efficient in terms of productivity, but they are well-adapted to local environmental conditions: climate, feed, diseases, parasites, etc. They are able to survive where improved breeds from temperate countries cannot do so without expensive treatments or protective measures (protective shelters, heating/cooling, heavy use prophylactic treatment with antibiotics). In general, local livestock breeds tend to be more in balance with their environment. As some traditional breeds are small in size, these animals need less feed than improved breeds (FAO). To corroborate this statement, there is a local breed in Kerala that has all of these qualities and is called Vechur cattle.



In India, 29 important local breeds of cattle are recognized (Singh. R. R., 2006) and their breeding tracts are confined to certain regions of the state, or more than one state, or only in a district of the State. For example the Umblachery cattle are found only in Thanjavur district of Tamilnadu. Gir Cattle is found only in Saurashtra region of Gujarat. Mewati cattle is found in Rajasthan, Haryana and Uttar Pradesh States. Likewise all the other cattle belongs to a certain part of our country and are not widespread throughout the country. These cattle types are adapted to particular regions with various environmental conditions.



The most recent calendar of the Indian Council of Agricultural Research (ICAR) themed 'Cattle Breeds of India', and published by the National Bureau of Animal Genetic Resources (NBAGR) features pictures of 30 breeds including Vechur cattle (Table 1). The thirty recognized breeds in India constitute around 20 per cent of the country's total cattle population.



On 14 May 2011 this writer, Mr. B. Rathinasabapathy and Dr. M. Manoharan, visited the Vechur Cattle Breeding Centre which is located at the campus of Kerala Agricultural University, Thrissur. The objective of the visit was to know more about the efforts of the university to save this local breed from the verge of extinction especially by Dr. Sosamma Iype, Retd., Professor of Animal Breeding and Genetics and her other colleagues. In this facility, efforts also are undertaken to save the following breeds : Kasargod cattle, Malabari and Attappady Goats, Ankamali pigs, and Kuttanadu ducks.

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The objectives of the project are: insurance for the future; for scientific studies; to preserve the local breeds; to preserve the heritage and culture; for a farmer who cannot afford sophisticated management practices but need milk for home consumption.

The Vechur cattle is said to have originated in Vechur, a small place near Vaikom in Kottayam district of south Kerala. Vechur breed are very popular because their milk production is higher and the milk and butter sweeter than that of some other local breeds. Mr. T. K. Velu Pillai wrote about this cow in Travancore State Manual of 1940. These cows are very much liked by the farmers because of their extremely small size, low feed requirement, good adaptation and high disease resistance. They have varied colouration, e.g., light red, black, white and grey.

Vechur cow has a long tail and its coat is smooth and glossy. The cow weighs about 95-150 Kg and bull weighs about 130-200 kg. Height is: cow 81-91cm and bull 83-105 cm. Humps are very prominent in bulls. Milk of this cow was considered having high medicinal values and it is extensively used in Ayurvedic medicine.

In the 1980's the breed was on the verge of disappearing altogether and most people thought it had completely vanished. Dr. Sosamma and her colleagues work voluntarily and passionately to bring back these cattle to public attention. Her team fervently hunted for the animals for months through their "Save Vechur Cattle Campaign". Her proposal for preservation of the germplasm of Vechur cows was accepted by the Kerala Agricultural University (KAU) and funded by them in the initial stage. Later, it was funded by Indian Council of Agricultural Research (ICAR). They bought the animals wherever they could find them. In 1989, Sosamma's students refurbished an old shed to house these animals. The unit was started with 4 cows, 1 heifer, 2 bull calves and a bull. In the meantime the search for animals continued in full swing by the team, and the number of animals had increased to 24 within a year.

In 1998, nine years after the establishment of the breeding programme, the numbers of animals multiplied due to best management practices and they sold out about 30 animals for establishing some other field units to propagate the breed further. These field units got necessary technical advice and semen from the Kerala Agricultural University. At the time of our visit we recorded the stock list of Vechur cattle as of 26 November 2010: Adults - 59 cows in which 11 were pregnant, 28 not pregnant, 04 heifers, 15 breeding bulls, 01 young bull and 20 calves in which 10 males and 10 females, a total of 79 animals.

Trichur people are very happy to have taken up the preservation of Vechur cattle breed and they are very proud to keep them. They are happy to have these cattle because of the milk yield by the cows is more than enough for a family's consumption, and because managing them doesn't require sophisticated equipment. Without the people's participation these result could not have been achieved so the output of the project is indebted to the collaboration between KAU and the public. Still, breeding is going on at the centre scientifically and animals are being sold to the public. If one wants Vechur cattle, he has to register with the centre. There is a waiting list and it will take about 5 years to get a cow from the centre.

Because of this effort to preserve the breed, Vechur cow has now attracted international respect and consideration. The Food and Agriculture Organisation (FAO) has listed Vechur cattle among the Indian breeds in their Domestic Animal Diversity Information System. The World Watch List of

Table 1. Cattle breeds of India

Sl. No.	Name of Breed	Name of Resident States
1	Amritmahal	Karnataka
2	Bachaur	Bihar
3	Bargur	Tamilnadu
4	Dangi	Maharashtra & Madhya Pradesh
5	Deoni	Maharashtra and Karnataka
6	Gaolao	Maharashtra & Madhya Pradesh
7	Gir	Gujarat
8	Hallikar	Karnataka
9	Hariana	Haryana, Uttar Pradesh and Rajasthan
10	Kangayam	Tamilnadu
11	Kankrej	Gujarat and Rajasthan
12	Kenkatha	Uttar Pradesh and Madhya Pradesh
13	Kherigarh	Uttar Pradesh
14	Khillar	Maharashtra and Karnataka
15	Krishna Valley	Karnataka
16	Malvi	Madhya Pradesh
17	Mewati	Rajasthan, Haryana and Uttar Pradesh
18	Nagori	Rajasthan
19	Nimari	Madhya Pradesh
20	Ongole	Andhra Pradesh
21	Ponwar	Uttar Pradesh
22	Punganur	Andhra Pradesh
23	Rathi	Rajasthan
24	Kandhari	Maharashtra
25	Red Sindhi	On organized farms only
26	Sahiwal	Punjab and Rajasthan
27	Siri	Sikkim and West Bengal
28	Tharparkar	Rajasthan
29	Umlachery	Tamilnadu
30	Vechur	Kerala

Domestic Animal Diversity, also published by the FAO, has listed Vechur cattle under the category of Critical Breeds, meaning nearly wiped out.

The acclaim of saving these cattle from dying out goes to the effort undertaken by the Kerala Agricultural University. Had they not begun the programme in 1989, the Vechur cattle might have vanished the Indian local breeds list. Kudos to Dr. Sosamma and her colleagues who were involved in the project from the beginning until today.

The Vechur Conservation Association which was active from the beginning was registered as a public trust in 1998 called the Vechur Conservation Trust, dedicated to the cause of domestic animal diversity conservation in Kerala.

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