# **Newly Registered Bovine Breeds of India**

## Sarath Kumar T<sup>1</sup> and Aseem Tara<sup>2\*</sup>

<sup>1</sup>Research Scholar, Division of Animal Genetics, ICAR-Indian Veterinary Research Institute, Izzatnagar, Bareilly, U. P. <sup>2</sup>Research Scholar, Animal Biotechnology Division, ICAR-National Dairy Research Institute, Karnal, Haryana, 132001 \*Corresponding Author: <a href="mailto:aseem.tara@gmail.com">aseem.tara@gmail.com</a>

Livestock plays a crucial role in Indian agriculture, engaging approximately 70% of its populace, mainly consisting of small to medium-scale farmers. India is recognized as a significant repository of diverse bovine breeds, making it exceptionally rich in germplasm resources. The dairy industry in India is experiencing a transformative shift, securing its position as the world leader in milk production. The ICAR-National Bureau of Animal Genetic Resources, Karnal (NBAGR), serves as the primary authority responsible for registering newly identified germplasm of livestock and poultry across the nation registered ten new breeds of indigenous livestock species. These include Kathani cattle (Maharashtra), Sanchori cattle (Rajasthan), and Masilum cattle (Meghalaya), as well as the Purnathadi buffalo (Maharashtra). Additionally, there are the Sojat goat, Karauli goat, and Gujari goat (all from Rajasthan), along with the Banda pig (Jharkhand), Manipuri Black pig (Manipur), and Wak Chambil pig (Meghalaya). During its 10th meeting on August 31st, 2022, the Breed Registration Committee (BRC) endorsed the registration of these livestock breeds from various states. With the addition of these breeds, the total count of registered indigenous breeds now stands at 212. This includes 53 for cattle, 20 for buffalo, 37 for goats, 44 for sheep, 7 for horses & ponies, 9 for camels, 13 for pigs, 3 for donkeys, 3 for dogs, 1 for yaks, 19 for chickens, 2 for ducks, and 1 for geese.

## Newly registered cattle breeds

## Masilum cattle

Accession Number:

## INDIA CATTLE 1300 MASILUM 0305312

Originating from Meghalaya, Masilum cattle thrive in the hill ecosystem, showcasing remarkable adaptation. Despite their small size, they boast sturdy and robust builds, suited for the terrain they inhabit. Among the Khasi and Jaintia communities, these cattle hold significance for their multifaceted utility, serving purposes ranging from sports to providing manure,

and even featuring prominently in socio-cultural festivals.

The cattle are compact in size, exhibiting a sturdy and robust build with a cylindrical form. They come in various shades, such as brown, grey, and



black. Their skin typically appears grey, while their muzzle displays hues of black and brown. Notably, their unique traits align perfectly with the demands of the challenging hill environment, making them invaluable to the communities that rear them. The management practices in the states of the northeast exhibit largely region a uniform pattern, predominantly characterized by extensive methods. There is a recognized necessity to elevate the productivity of indigenous cattle through genetic enhancement initiatives. Additionally, there is potential to delve into organic livestock farming, given the favourable conditions within the state, which could greatly benefit tribal farmers, enhancing their livelihoods and bolstering nutritional security in the region.

## Sanchori Cattle

Accession Number:

## INDIA\_CATTLE\_1700\_SANCHORI\_030521

Sanchori cattle predominantly inhabit the Jalore district within Rajasthan state, which is bordered by Barmer to the northwest, Sirohi to the southeast, Pali to the northeast, and Banaskantha district of Gujarat to the southwest. Consequently, the breeding grounds of Sanchori cattle are situated between those of the Tharparkar and Kankrej breeds. The name "Sanchori" originates from the region where



these cattle are primarily found, namely Sanchore and the adjoining tehsils of the Jalore district. Sanchori cows are noted for their significant milk production



potential, particularly thriving in the hot agro-climate of the area.

Sanchori cattle possess a sturdy and active build, characterized by a compact body and a deep belly. Typically, the cows display coats of white or grey, while the bulls exhibit hues ranging from white to dark grey or black. The body length, height at the withers, and chest girth of Sanchori cattle are shorter than those of Tharparkar cattle, but they feature a greater body length and chest girth, with slightly lower height at the withers when compared to Kankrej cattle. The animals are typically maintained in herds, ranging from 2 to 10 animals, within a semi-intensive production system and through stall feeding practices. Various reproductive and productive parameters were observed for Sanchori cows: age at first calving fell between 36 to 48 months (averaging at 39.5 months), lactation length ranged from 8 to 15 months (averaging at 10.16 months), calving interval spanned from 12 to 20 months (averaging at 14.4 months), dry period varied between 0.5 to 10 months (averaging at 4.3 months), and service period extended from 2 to 11 months (averaging at 5.44 months). The lifespan of Sanchori cattle was determined to be between 20 to 25 years, with approximately 12 to 15 lifetime calvings. On average, Sanchori cows produced a daily milk yield ranging from 3.05 to 16.3 litres, with an average yield of 9.08 litres.

#### Kathani cattle

Accession Number:

## INDIA\_CATTLE\_1100\_KATHANI\_03051

The Kathani cattle breed, which resides in the eastern region of Vidarbha in Maharashtra state, is recorded in the historical gazetteer of Chandrapur district under the name Telangpatti. The milk production of Kathani cattle is moderate, and with improved management and nutrition, their productivity can be enhanced. Kathani cattle are versatile, serving dual purposes. They also exhibit strong draft capabilities, making them well-suited for working in marshy areas, particularly for cultivating paddy.



In the Kathani cattle, traditional practices of group grazing are observed, likely due to the presence of ample open grazing land, particularly in forested areas, and the availability of manpower for herding the animals. This approach promotes a zero-input system, where the returns from the animals, such as a small quantity of milk, manure, and bullocks for agriculture, constitute surplus income for the community. Group grazing involves two primary elements: the gathering of animals at a common location before grazing, referred to as 'Aakhar' in Gadchiroli district and 'Gohan' in Chandrapur and Gondia districts, and the local caretaker of these animals known as 'Gayaki'.

The Kathani cattle population derives its name from its habitat in the Kathani river basin near Gadchiroli city. In this region characterized by heavy rainfall and marshy terrain ideal for paddy cultivation, the relatively lightweight bullocks of Kathani cattle prove to be well-adapted for various agricultural



tasks. This suitability arises particularly because agricultural mechanization in the area is less prevalent. The population exhibits three distinct coat colors: white, blackish, and reddish, with the highest prevalence observed in animals with a white coat, followed by those with a reddish and blackish hue. Additionally, three variations in muzzle colour were observed: black, mottled, and carroty. Straight horns were observed in over fifty percent of the animals, while the remainder displayed curved horns. The customary practice within the breeding area is not to rear these animals specifically for milking purposes; instead, all farmers utilize the suckling method. The average daily milk production was recorded at 0.55±0.01 litres.

# Newly registered buffalo breed

## Purnathadi buffaloes

Accession Number:

## INDIA\_BUFFALO\_1100\_PURNATHADI\_01020

Purnathadi buffaloes, also known locally as 'Bhuri buffaloes,' stand out for their distinctive features, notably their brown coat colour and impressive milk production potential. The name



"Purnathadi" originates from the Purna River, which originates in the Satpuda hills, traverses through Akola and Amravati districts of Vidarbha, and has played a significant role in shaping the evolution of this buffalo breed along its banks. This valuable buffalo genetic resource is carefully preserved by rural farmers in the Vidarbha region of Maharashtra state. These animals are of medium size, boast high milk fat content, display good reproductive capabilities, and thrive in the challenging hot climate of Vidarbha.

The body coat colour of Purnathadi buffaloes ranges from whitish to light brown. Newborn calves typically exhibit a complete whitish coat, which gradually transitions to brown as they age. This lighter body coat colour may contribute to their adaptability to the region's extreme hot climate. They exhibit unique physical characteristics such as a brown to pinkish muzzle, a white patch of hair on the forehead, a white tail switch, and occasional white patches on their leg extremities. The distinctive body coat colour and unique physical traits serve to differentiate Purnathadi buffaloes from other populations in the region.

Daily milk yield ranges from 4 to 6 kg, while peak yield typically falls between 6 and 7 kg. Total lactation milk yield spans from 800 to 1000 kg. Lactation periods last between 210 to 255 days on average, with an average of 235 days. Dry periods, on the other hand, vary between 180 and 255 days, with an average of 210 days. The average calving interval for Purnathadi buffaloes is approximately 450 days, ranging from 420 to 480 days. The age at first calving generally occurs around five and a half years, varying between 5 to 6 years. Purnathadi buffalo milk contains comparatively higher fat percentage, which makes it preferred buffalo for milk production. The pooled averages for various milk constituents of Purnathadi buffalo were found to be 8.18±0.22% milk fat, 4.26±0.05% lactose, 3.68±0.07% proteins, 8.86±0.09% SNF. Additionally, the density of milk, freezing point, and salt were estimated at 28.68±0.42, -0.523±0.007, and 0.62±0.01, respectively. Market prices for Purnathadi buffaloes are influenced by factors such as size, milk yield, and pregnancy status.

## References

Ali SS, Kuralkar SV, Ingawale MV, Waghmare SP, Manwar SJ, Kataria RS, Vohra VI. Phenotypic characterization, management, and socioeconomic impact of Purnathadi buffaloes. Indian J Anim Sci. 2019;89(10):260.

https://icar.org.in/index.php/ten-new-breedsindigenous-farm-animals-registered-icarnbagr

Mohad S, Zinjarde RM, Atkare VG, Ingole AS. Feeding and management practices adopted by Kathani cattle owners in Mul Tahsil of Chandrapur district. J Soils Crops. 2020;30(2):315-320.



## Newly Registered Bovine Breeds of India

- Pundir RK, Singh PK, Dangi PS, Kumar A, Borah S, Mahanta N, Mettei SL. Phenotypic characterisation of indigenous cattle of Meghalaya State. Indian J Anim Res. 2019;53(1):59-62.
- Purohit H, Pannu U, Sharma R, Kumar V, Prasad S, Vyas J, Harsh A. Dairy performance of recently registered Sanchori cattle of Rajasthan. The Pharm Innov J. 2023. 12(1):3004-3006.
- Singh PK, PUNDIR P, Sadana DK. Physical features and performance of unexplored Sanchori cattle population of Rajasthan state. The Indian J Anim Sci. 2015;85(8):923-926.
- Yadav R, Zinjarde R, Atkare V, Kadu K. Production Performance of Kathani Cattle in Mul Tahsil of Chandrapur District. J Anim Res. 2021; 11(4):741-744.

\* \* \* \* \* \* \* \*

