

Recently Recognized Indigenous Cattle Breeds of India

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Introduction:

India is the seventh largest country in the world and is a mega-biodiversity centre (Srivastava et al., 2019). Over 70 per cent of its people are engaged in vocations connected with farming and animal husbandry. In India, total livestock population is 535.78 million and among that 192.49 million are cattle, which is cover 35.94 percent of total livestock population of the country. The female cattle are 145.12 million. The Indigenous/non descript cattle population is 142.11million. The Indigenous / non-descript female cattle population has increased by 10% in 2019 as compared to previous census (Anonymous, 2019). When we seeing global picture almost 30% of the world's cattle population of about 1.4 billion exist in India (Robinson et al., 2014).

India ranks first in milk production with 187.75 million tonnes of milk in 2019. The Indigenous cattle contribute 10% of total milk production in the country whereas non-descript cattle contribute 11% of total milk production in the country. Livestock breeds are recognized as significant components of world biodiversity because the genes and gene combinations they carry may be useful to agriculture in the future (Hall et al., 1995). Diversified agro-ecological zones in India have helped to develop number of cattle populations. Breed characterization allows studying assessment of genetic variability, a fundamental element in working out breeding strategies and genetic conservation plans.



There are 50 recognized breeds of cattle in India, in addition to large number of non-descript cattle. In recent times, several of the indigenous breeds suffered decline mainly due to their becoming uneconomical. India has large number of breeds with wide genetic diversity than other countries. The local breeds have many merits over exotic breed's viz. better disease resistance than exotic breeds, more suitable for low input management system, survive better in local environmental condition, suitable for draught work In addition; existence of superior indigenous breeds can provide valuable research inputs for developing superior breeds.

It is therefore important that Indigenous breeds of cattle are conserved, developed and proliferated. Breed registration and recognition is a very important step for breed certification and all relevant information regarding the enormous and bio diverse animal genetic resources of our country the procedure shall lead to formation of breed inventory and try identifying and understanding these unique genetic resources which shall ultimately facilitate the genetic improvement of the native livestock population.

ICAR-National Bureau of Animal Genetic Resources, Karnal (NBAGR) is the nodal agency for the registration of newly identified germplasm of livestock and poultry of the country. Newly identified breeds are approved by Breed Registration Committee (BRC) of Indian Council of Agricultural Research (ICAR) headed by Deputy Director General (Animal Sciences), ICAR and represented by National Biodiversity Authority, Department of Animal Husbandry & Dairying (GoI), ADGs (ICAR), Directors of ICARs species specific animal science institutes and NBAGR.

Breed registration Committee in its meeting held on 24th January, 2020 at New Delhi approved registration of thirteen new breeds of livestock and poultry. This includes seven breeds of cattle, two breeds of pig, and one breed each of buffalo, sheep, donkey and duck. After including these newly registered breeds, total number of indigenous breeds now in the country is 197, which include 50 for cattle, 17 for buffalo, 34 for goat, 44 for sheep, 7 for horses & ponies, 9 for camel, 10 for pig, 3 for donkey, 1 for yak, 19 for chicken, 2 for duck and 1 for geese.

NEW REGISTERED BREEDS / LINES OF CATTLE

S.No.	Breed	Home Tract	Accession number

1	Poda Thurpu	Telangana	INDIA_CATTLE_3600_PODATHURPU_03044
2	Nari	Rajasthan and Gujarat	INDIA_CATTLE_1704_NARI_03045
3	Dagri	Gujarat	INDIA_CATTLE_0400_DAGRI_03046
4	Thutho	Nagaland	INDIA_CATTLE_1400_THUTHO_03047
5	Shweta Kapila	Goa	INDIA_CATTLE_3500_SHWETAKAPILA_03048
6	Himachali Pahari	Himachal Pradesh	INDIA_CATTLE_0600_HIMACHALIPAHARI_03049
7	Purnea	Bihar	INDIA_CATTLE_0300_PURNEA_03050

Poda Thurpu:

Poda Thurpu is also known as Thurpu. In western parts of Telangana, they are commonly known as Thurpu Edlu. These are medium sized cattle with compact body distributed in Nagarkurnool district of Telangana. Bullocks have excellent draught capacity in terms of endurance, speed & stamina and are preferred in both dryland and wetland agriculture for heavy ploughing and carting heavy loads. They are quick and agile. Poda Thurpu breed has excellent tolerant capacity to draught conditions and can sustain during less fodder and water availability. Wild & aggressive nature of these animals is helpful to protect themselves from predators in the forest area. Animals have white coat with brown patches or Red/brown coat with white patches. Horns are straight and upward or forward pointing in orientation, and broad at the base. Forehead is convex with deep groove at the centre in majority of cases. These animals are usually maintained under open grazing system and have excellent long migration capacity over undulated forest topography. Poda Thurpu cattle are reared mainly for draught purposes. Daily milk yield ranges from 2 to 3 kg and lactation milk yield from 494 to 646 kg. Herd size ranges from 23 to 75. Population size is approximately 15,000.



Nari cattle:

Nari is also known as “Sirohi”. The name “Nari” is derived from the word Nar which means hills. These breed is distributed in Sirohi and Pali districts of Rajasthan, Sabarkantha and Banaskantha districts of Gujarat. Majority of the Nari cattle population are found surrounding the Aravali forest range. These are medium in size with excellent migratory capacity and can survive well on grazing and in the open housing system during all kinds of weather. Coat colour is white or greyish white in majority of cows and white, greyish white and sometimes black in bulls. Horns are spirally curved and outward forward pointing in orientation. Forehead is broad and slightly concave in majority of cases. These are dual purpose cattle used for both milk and draught purpose. This breed is excellent in draught power in both plains and hilly forest areas. Daily milk yield ranges from 5 to 9 kg and lactation milk yield from 1119 to 2223 kg. Population size is approximately 55,000.



Dagri cattle:

Dagri is also known as “Gujarat Malvi”. Dagri in colloquial language means ‘Deshi’ or old or native. Dagri cattle are distributed in Dahod, Chhotaudepur and parts of Mahisagar, Panchmahals and Narmada district of Gujarat. Coat colour is predominantly white,

sometimes with grey shade. Small sized animal with compact body and straight forehead. Horns are curved upward in a lyre shape or straight with pointed tips. It is a draught purpose breed thus extensively used as animal for agricultural operations in hilly areas. Milk yield is less, 1.5-3.0 kg/day and 75-650 kg/lactation which is mainly used for household consumption. Less feed requirement, survives mainly on grazing, hardly stall fed. Population size is approximately 2, 80,000.



Thutho cattle:

Thutho breed is also known as “Ameshi”, “Sheapi”, “Chokru” and “Tseso”. Thutho cattle are indigenous to Nagaland, and are medium in size, hardy, well built and docile. This breed is mainly used for meat, draught and manure. Animals are well adapted to hilly region and able to graze on hill slopes even during rainfall. Body colour is predominantly black. Bulls are darker in colour. Around 40% animals have white spots on the face. Some of the animals have white spots on legs and under body too. Fore-head is small and straight. Horns are short and stumpy. Ears are moderate in length and horizontal in orientation. Hump is small to medium in size and dewlap is medium in cows and large in bulls. Tail is up to the hock mainly with black switch. Udder is small. Backline is uneven, slopes behind the small hump, and rises to peak between hipbones and then drops sharply to the tail head. Milk yield is less (0.5-1.5 kg/day). Population size is approximately 53,000.



Shweta Kapila Cattle:

Shweta Kapila breed is also known as “Gaunthi and Gavthi dhavi”. Shwet means white, and kapila refers to a cow having uniform coat colour. The complete white coloured cattle found in North Goa and South Goa districts of Goa State. White colour extends from muzzle to tail switch including eyelashes and muzzle (whitish brown). Short to medium statured animal with straight face, straight and small horns directed upward and outward and small to medium hump. Udder is bowl shaped and small to medium in size with cylindrical teats having rounded tips. Daily Milk Yield ranges from 1.8 to 3.4kg with an average of 2.8 kg and lactation milk yield from 250 to 650kg. Height ranges from 97 to 137cm. Population size is approximately 22,000.



Himachali Pahari cattle:

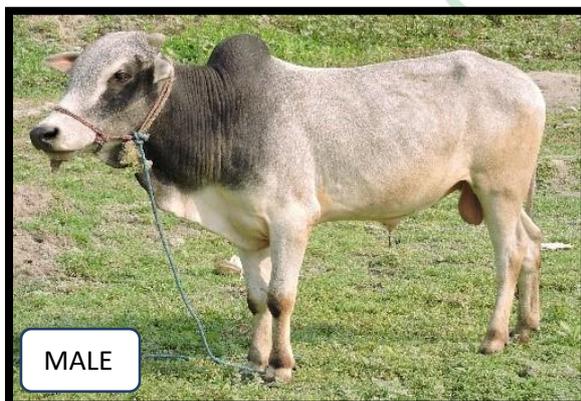
Himachali Pahari is also known as “Pahari”, “Desi”, “Local”, “Gauri” and “Himdhenu”. This breed is distributed in mid-hill to high hills region of Himachal Pradesh (Kullu Chamba, Mandi, Kangra, Sirmaur, Shimla, Kinnaur, Lahul & Spiti districts) and adapted to mountain topography extremely cold climate, and fodder scarcity. It is a draught breed. Small to medium sized animal, primarily black and blackish brown in colour with compact cylindrical

body, short legs, medium hump, horizontally placed ears and comparatively long tail. Horns are medium in size and are mainly curved in lateral and upward direction. Well suited to mountainous livestock production system as a source of milk, draught and manure. Adult weight varies from 200 to 280 kg in males and 140 to 230 kg in females. Height varies from 90 to 120cm. Daily milk yield ranges from 1 to 3 kg and lactation milk yield from 350 to 650 kg. Population size is approximately 7, 59,000.



Purnea cattle:

Purnea is named after its breeding tract. These cattle are distributed in Araria, Purnea and Katihar districts and the Adjoining areas of Kishanganj, Supaul and Madhepura districts of Bihar. These are small sized animals with three different coat colours viz. grey, red and black. These are reared for milk, manure and to some extent for draught power. These cattle have medium hump, small to medium dewlap, small naval flap and small to medium sized udder. Head is medium in size. Most of the Purnea cattle has flat poll while some have moderately prominent poll. Horns are small in size, straight and mostly carried upwards sometimes laterally. Daily milk yield ranges from 1 to 5kg and lactation milk yield from 360 to 785kg. Population size is approximately 2, 19,000.



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