

Buffalo Breeds of Odisha

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<https://doi.org/10.5281/zenodo.14164765>

Livestock farming is a vital component of the agricultural economy in Odisha, India, contributing significantly to the livelihoods of rural households. With a diverse range of livestock including cattle, buffaloes, goats, sheep, pigs, and poultry, Odisha's farming practices are deeply integrated into the socio-economic fabric of the state. The sector not only provides essential nutrition in the form of milk, meat, and eggs but also supports crop production through manure and draught power. Odisha's geographical diversity, ranging from coastal plains to hilly terrains, influences the variety and distribution of livestock. Traditional practices coexist with modern farming techniques, supported by government initiatives aimed at improving productivity and sustainability. Programs focused on breed improvement, disease control, and veterinary services have been instrumental in enhancing livestock health and yield.

As per the 20th livestock census' 2019, the state has 4.6 lakh buffaloes. And the average productivity of buffaloes was 4.61 lit/d. Unfortunately, there's a huge demand and supply gap in milk and milk products in the State. Further, the poor tribal families are undernourished with milk protein due to non-availability of milk at their households and they are traditionally less acquainted with drinking milk. In order to overcome this malnutrition problem in tribal families and to promote livelihood of the tribal/marginal/small and the landless farmers through Dairy Farming activities under State Plan, the State Govt. has started implementing a new scheme called "Buffalo Entrepreneurship

Development Scheme (GRADED MURRAH SHE-BUFFALOES 1+1)" from the financial year 2023-24.

Importance of Buffalo Farming in Odisha

Buffalo farming holds particular importance in Odisha's livestock sector due to the significant benefits it offers to the rural economy and agricultural sustainability. Buffaloes are well-adapted to the climatic conditions of Odisha and are a crucial source of milk, meat, and draught power.

1. Milk Production:

- Buffaloes are major contributors to milk production in Odisha. Buffalo milk is preferred for its higher fat content, which is beneficial for making dairy products like ghee, butter, and cheese.
- The dairy industry, supported by buffalo farming, plays a critical role in enhancing nutrition and food security in rural areas.

2. Economic Benefits:

- Buffalo farming provides a steady source of income for rural households. The sale of milk and meat significantly contributes to the livelihoods of small and marginal farmers.
- Buffaloes also fetch better prices in the market compared to other livestock, thereby improving the economic stability of farming families.

3. Draught Power:

- Buffalos are used extensively as draught animals for ploughing fields and transporting goods, particularly in regions where mechanized farming is less prevalent.
- Their ability to work in waterlogged and heavy soil conditions makes them invaluable for paddy cultivation, which is predominant in Odisha.

4. Manure Production:

Buffalo manure is a rich source of organic fertilizer, improving soil fertility and crop yields. This supports sustainable farming practices and reduces dependence on chemical fertilizers.

5. Adaptability and Resilience:

- Buffalos are highly resilient to harsh climatic conditions and diseases, making them a reliable asset for farmers in the face of environmental challenges.
- Their ability to thrive on low-quality fodder and agricultural by-products reduces the cost of maintenance and enhances farm sustainability.

6. Cultural Significance:

Buffalos hold cultural importance in many rural communities in Odisha. They are often integral to traditional festivals and rituals, reinforcing their value beyond mere economic benefits.

CHILIKA



The animals are primarily found in villages in and around the Chilika Lake like Bhusandapur,

Balugaon, Satapada, Brahmagiri and Krushnaparashad area of Khurda and Puri district. The animals are mostly reared in free range system depending upon the saline weeds of Chilika lake. The animals depend upon the weeds found under the water of Chilika lake and has a capability to put their snout inside the water for 2-3 minutes to feed upon these weeds.

Breed Description

- The animals are medium sized and compact.
- Horns are **crescent shaped**. Bent backward and inward.
- Coat colour is mostly dark brown with brownish hair.
- Forehead is flat and proportionate to the body size.
- Ears are small to medium sized with little **droopy**.
- Udder is small. Milk vein is less prominent.
- Tail is small to medium in length.
- These animals attain maturity at the age of around 30-34 months.
- The lactation length is around 238 days.

Breed Utility and Special Qualities

- The breed is a **dual-purpose** animal with good quality milk and draft ability.
- The breed possesses extra-ordinary ability to thrive on fodders grown in saline soil. Its salinity tolerance is of particular interest to animal breeders which draws attention for research.
- Chilika curd is a traditional dairy product made by the ethnic community of Chilika (Odisha, India) using milk from the Chilika Buffalo. It is prepared in a cup-shaped bamboo basket and is renowned for its exceptionally long shelf life, which is likely due to its resistance to fungal spoilage, particularly from *Candida parapsilosis*.

KALAHANDI

The animals are mostly found in Bhawanipatna, Junagada, Golamunda and Dharnagada blocks in Kalahandi district. The animals are mostly reared under semi-intensive system with very less input.



Breed Description

- The animals are medium sized, horned, strong dual type and docile with **almost no dewlap**.
- Males are strong and vigorous.
- Horns are long laterally upward and inward, curved to make **half circle** appearance.
- Coat colour blackish **grey** to **ash grey**.
- Small sized head with flat and straight forehead.
- Ears are medium and horizontal in position
- Udder is small. Milk vein is less prominent.
- Tail extends below the hock.
- These animals attain maturity at the age of around **34-36 months**.

Breed Utility and Special Qualities

- Milk, Draught & Manure
- The breed is popular for **high longevity** and service life as **draft** animal.
- Some animals are fairly good milkers producing around **3 liters** of **milk** a day.
- **Horns** are used for making **handcrafts** and house hold items.

MANDA

Manda buffalo is distributed in Koraput, Malkangiri and Nawarangapur districts of Odisha. It is a sturdy buffalo, well adapted to hill ranges of Eastern Ghats and plateau of Koraput region of Odisha.



Breed Description

- Body colour is mostly **ash grey and grey with copper-coloured** hairs. Lower part of leg is lighter.
- Horns are broad, emerging slight laterally, extending backward and inward and making **half circle**.

Breed Utility and Special Qualities

- It is reared for draught, milk and manure.
- Both male and females are used for agriculture operations.
- Daily milk production ranges between 1.2 to 3.7 kg.
- Average fat percentage in milk is **8.4**.
- Manda buffaloes are reared mostly under extensive system.

Besides these three registered buffalo breeds, there are two other significant buffalo population seen in Odisha.

SAMBALPURI (KIMEDI / GOWDOO)

The home tract of this Sambalpuri buffalo breed is controversial. Originally it was known to be the habitat of Sambalpur area of Orissa, later on, it has been suggested that the main habitat of this breed is around Bilaspur district of M.P. wherefrom calves are brought by “gowdoo” (Herdman) to Sambalpur area.

Breed Description

- Sambalpuri buffalo breed is large and powerful having a long, narrow barrel and a prominent forehead.
- Sambalpuri buffalo breed's Body and coat are generally black but it varies to brown and ash grey.

- Horns are short, narrow and curved into a semi-circle, extending backwards, upward and then forward at the tip.
- The tail is long and narrow with white switch.

Breed Utility and Special Qualities

- Sambalpuri buffalo breed Males are very active and good for drought purposes which are affected by high atmospheric temperature.
- Buffaloes are a regular breeder and comparatively more productive breed of the region; females breed regularly and produce milk satisfactorily.
- Average milk yield varies from 2270 to 2720 kg in 340 to 370 days with a daily average of over 7 kg in good milkers.

JERANGI

This Jerangi buffalo breed of buffalo is widely distributed in Jerangi hills of Orissa and Northern parts of Visakhapatnam and west of Ganjam in Andhra Pradesh.

Breed Description

- Jerangi buffalo breeds are one of the dwarf breeds of buffalo and its height does not exceed four feet.
- Horns are conical and small and run backwards; body colour is black.
- The buffaloes have a short face and small barrel.
- Skin is thinner and black-coloured.

Breed Utility and Special Qualities

Not that much good in milk production but are useful animals for ploughing in water-logged paddy fields, with moderate draught capacity. Also called as **deer buffalo** due to their looks. Sometimes termed as **dwarf buffalo**.

Chilika Buffalo Promoters Society (CBPS) and Kalahandi Buffalo Producers Society (KBPS) have been set up in Native tract of Chilika and Kalahandi, respectively towards breed improvement & conservation of these breeds. Conservation and improvement of threatened indigenous identified cattle and buffalo breeds of the state were taken up

Conclusion

The government of Odisha, recognizing the importance of buffalo farming, has implemented various schemes to support this sector. These include initiatives for genetic improvement, veterinary care, and market linkages to ensure better returns for farmers. As a result, buffalo farming continues to be a critical driver of rural development, economic prosperity, and agricultural sustainability in Odisha. The state's emphasis on livestock farming is evident in its policy frameworks and development projects that aim to boost rural incomes, ensure food security, and promote inclusive growth. As Odisha continues to advance its agricultural sector, livestock farming remains a cornerstone of its rural development strategy, reflecting both cultural heritage and economic significance.