

Gir Cow and its Benefits in Dairy Farming

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Introduction:

The Gir is one of the principal Zebu (Zebu is characterized by a fatty hump on their shoulders, a large dewlap, and sometimes drooping ears) breed cattle originating in India. Gir cow is one of the famous milch breed among indigenous cattle. Gir cow native tract of the breed is Gir hills and Gir forest of Kathiawar including Junagadh, Bhavnagar, Rajkot and Amreli districts of Gujarat. This breed is also known as Bhodali, Desan, Gujarati, Kathiawari, Sorthi and Surti in different parts of the breeding tract. The body of Gir animals is well proportioned, the head is moderately long but massive in appearance with prominent bony forehead straight and leveled back are the most the marking characters of the breed and body colour is red to white, Udder is well developed and round in Gir cattle. They originated in southwest India in the state of Gujarat and have since spread to neighbouring Maharashtra and Rajasthan. Cattle of this breed are most important for their tolerance to stress conditions and resistant to various tropical diseases. Gir animals are considered with low overall mortality (3.63 per cent). Due to their special qualities, animals of this breed have been imported by Brazil, USA and other many countries for breeding purpose. Cattle of this breed are good milk yielders in the indigenous cattle. Total lactation milk yield averaged 2063 litres in an average lactation period of 326 days. Average fat per cent in the milk ranged between 4.69-4.97.

ADVANTAGES OF GIR COW FARMING:

- Gir cows are considered as one of the largest dairy breeds in India, hence has more value.



- High milk production capacity. Also the milk from the cows is considered to be of premium quality due to the presence of A-2 beta casein protein substance.
- Can sustain in different environmental and habitat conditions
- Low maintenance structure needed for farming Gir cows.
- The average lifespan of the cow is high (12 to 15 years) and Low mortality rate.
- The Gir breed has high fertility rate and can produce up to 10 calves (average) during its lifespan.
- This cattle breed shows high resistance to diseases.
- The value of the milk in the market is high.
- This cow is adaptable to mechanical milking techniques.
- Natural mating is preferred while rearing this breed rather than artificial insemination techniques.

Milk Benefits:-

- Gir Cow milk contains amino acid which helps you to fight against diseases like Joint Pain, Asthma, Obesity, insomnia, etc.
- Gir Cow milk protects the colon cells from the chemicals which lead to cancer like diseases
- Help you to develop a strong immune system
- Antioxidant properties are rich in Gir cow milk.
- Gir Cow milk is a rich source of calcium and helps you to build strong bones.
- Various studies show that it helps patients to overcome arthritis problems as well as.
- It prevents the formation of serum cholesterol in the body.
- It reduces the acidity problem and increases metabolism.
- Gir cow milk is considered good for kidney.
- Potassium present in the milk is better for proper heart function.



Urine Benefits:-

Urine of a pregnant cow is considered special, it is claimed to contain special hormones and minerals. According to Ayurveda, Gomutra (cow urine) can cure leprosy, fever, peptic ulcer, liver ailments, kidney disorders, Asthma, certain allergies, skin problems like Psoriasis, anaemia and even cancer.

Following are some amazing health benefits of cow urine:

- Cow urine is claimed to be helpful in the treatment of leprosy, abdominal colic pain, bloating, and even cancer.
- It is used in the treatment of fever by mixing it with black pepper, yoghurt, and ghee.
- Anaemia can also be treated by a mixture of cow urine, Triphala (an herbal concoction), and cow milk.
- Cow urine is also said to be helpful in treatment of peptic ulcer, asthma and certain liver ailments.
- A mixture of gomutra and dharuharidra is used for treating Epilepsy.
- Cow urine also purifies the human body from inside out by flushing out all toxins, thereby reducing large number of health risks, including diabetes, obesity, high blood pressure, etc.
- Cow urine is also used as sprays for pest control both in houses as well as for agriculture.
- In addition to that, there are cosmetic products like soaps and shampoos that are made from cow urine.

Housing Management for Gir cows:

The house should be built in north-south direction and should be maintained dry. The house for the cows is generally made of concrete. The house should be well aerated and roof height should be 16 to 18 feet in the centre with 8 feet high side wall. The walls should be made of brick and the floor cemented. If a low investment house is planned, then the roof is made up of thatched tile instead of cement. The house should be built such that there is at least 5 Square meter of space per each cattle. A drainage system within the house is a must for



the removal of trash. The house should be thoroughly cleaned to avoid the spread of bacteria, mosquitoes, parasites and virus which may otherwise cause disease to the cattle.

Feeding management for Gir cows:

Feeding itself covers upto 50-60 percent of the total cost of farming. Apart from open field grazing that is necessary for the reduction in the cost associated to feed, Gir cows are to be fed with dry fodder (Jowar straw, Bajra straw, Wheat straw etc.), green fodder and concentrate (cotton seed cake, mustard oil cake, till cake, soya husk and grains) and jaggery etc. Mineral mixture should be mix with cow feed. Over-feeding has to be avoided and proper routine has to be followed while feeding. The feed has to be stored at a dry place to avoid contamination and feed has to provided in the form of medium ground powder. Feeding has to be done in accordance with the age and condition of the cows. Also along with feed, a decent amount of water has to be provided as well.

Health care management for Gir cow farming

The mortality rate in Gir cattle is very low. The risk of death in a cow is high when it is just born till the age of one month. Broncho-Pneumonia and Pneumo- Enteritis are the two main reasons for the mortality of calves. The viral respiratory vaccine is administered to the calves when they are 2 to 3 weeks old. When the calves are 1 to 3 months old they are given Clostridial vaccination. Gircow may sometimes suffer from reproductive disorders like Prolapse, Placenta retention, Dystokia etc. Since cows are fed with rice and wheat straw, they get infected due to the Fusarium fungus present in the straw and develop a disease called 'Deg Nala'. This disease challenges the movement of the cows by affecting their legs. Proper antibiotic and anti-inflammatory drugs are given intramuscularly can treat the disease and show improvement in 45 days. Deworming treatment should be done to the cows at an interval of 30 days. Gir cattle can be affected from many other common diseases such as digestive disorders, jaundice, anthrax, Anaplasmosis, Anaemia, Foot and Mouth disorders, Hypomagnesaemia, Lead Poisoning, Rinderpest, Black quarter, Ecto parasites,

Endo parasites, Mastitis and Ringworms. Proper care and hygiene along with suitable treatment can help cattle live longer.

Yield:

This breed of cow produces an average of 2063 litres in an average lactation period of 326 days. An average of 1600-1700 liters of milk per lactation is produced during the first calving process by these cows. It increases to around 1800-2000 liter of milk for mature cows for each lactation. The selling price for a liter of milk stands between rupees 60 to 85 and is comparatively higher when compared to other breeds. The milk is healthier and enjoys a higher market demand due to the presence of casein and whey protein in it. Also the fat per cent in Gir cow milk ranged between 4.69 to 4.97.

