

Mithun : The Pride animal of North-eastern hilly region of India

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Abstract

Mithun, the pride animal called as 'Cattle of Hilly Region' of north-eastern hilly region of India and tropical rain forest of China. The animal plays an important role in the day to day socio-economic life of the local tribal population. Mithun (*Bos frontalis*) is a rear species of livestock and is found in the north-eastern region of our country like Arunachal Pradesh (75 per cent of the total population), Nagaland (60 per cent), Manipur (0.8 per cent) and Mizoram (0.1 per cent) having total population 0.25 million according to census 2003 and also very meager in Myanmar, Bhutan, and Bangladesh. The animal has got good potential for production of quality meat, milk and leather. Mithun is the 'Cattle of Hilly Region' and is one of the domesticated animals from the North-eastern hilly region and mainly found in tropical rain forest of North-eastern hilly region. Very meager population is found in Myanmar, Bhutan and China. There are four defined mithun strains depending up on the geographical areas namely Arunachal, Nagaland, Manipur and Mizoram strains, respectively.

Keywords: - Mithun, rearing, feeding, breeding, diseases

Economic importance of mithun rearing

The tribal community those who possess the mithun are considered to be the sign of prosperity in that society. Besides, this animal for is also used as marriage gift and sacrificed animal for different cultural ceremonies and ritual consume meat. The milk produced by the mithun is meager in quantity but highly nutritious one. The meat of the mithun is called as Beef. It is tender and delicious, have rapid growth rate 300-600 gm/ day as compare with other livestock. The concentration of growth hormone in plasma is 30- 90 ng/ ml is much higher in mithun (Mondal *et al*, 2006). The consumption of meat by the tribal people is not the regular practice however they scarifies the meat during important social ceremonies and ritual. The dressing percentage of mithun is 45-55 per cent and varies according to age; it is advisable to slaughter the animal at the age of 4-5 years to receive maximum dressing percentage.

The consumption of the mithun milk is not a routine practice however; mithun produces around 1-1.5 kg milk/ day / animal (Nath and Verma, 2000). It

contains 3.4 -17 per cent of fat, 6.8-22.2 per cent SNF and 4.4-9.8 per cent protein, hence, mithun milk is superior from nutrition point of view, hence used to prepare different delicious milk products (Annual report, 2003-04).

Mithun hide and skin is of very good quality than the cow leather having more value in tanning industry due to there toughness and longevity, therefore utilized for the production of goods like shoes, garments, bags, jackets, purses, attractive ornamental things and furniture covers etc.

Rearing systems of mithun

The farmers rear this animal at various altitudes between 1000-3000m MSL. The animal is exclusively maintained under free grazing condition. The animal can sustain on scanty fodder, shrubs, herbs and other natural visitations on free range condition following rotational grazing in hilly areas of mountain at various attitude between 1000-3000 m MSL. The tribal people do not provide any additional balanced ration mostly mithun owners keep these animals in a community hear or village panchyat assins mithun grazer to take care

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off their animals under free range conditions farmers also practice rotational grazing by shifting there animals from one region to another hilly areas of the mountains.

The houses are constructed with locally available chief wooden material and the space requirement for the adult and young mithun is approximately 8-9 sq. meter and 5-6 sq. meters respectively.

Feeding of mithun

Mithuns are entirely depends on the pasture land and available jungle fodder. To avoid the mineral deficiency in these animals, feeding of salt and licking of the mineral water sources is the common practice in hilly region during monsoon season. During the flush season they get abundant of green grass, fodder, herbs and shrubs, while during the lean period there is a paucity of feed and much concentration is required to be done to feed the concentrate ration with 15 percent crude protein (C.P.) and 70 percent total digestible nutrient (TDN) fortified with salt and mineral mixture. For lactating mithun, as it produces less quantity of milk no additional feed is required, where as for the animal under semi-intensive system the feed supplement may be provided in the shed in late evening and early in the morning. It is suggested that, in mithun the drinking water requirement is approximately 9-12 percent of body weight. It is noted that, scientific feeding in mithun is required for better production and performance.

Breeding practices in Mithun

Mithun bred throughout the year and no definite breeding season is observed. Mithun is polyestrous animal. The adult female shows repeated estrus cycle after every 19-24 days interval with silent estrous without bellowing and having standing heat period ranging from 4-16 hours. The length of the gestation period is 290-320 days. The service period is 50-100 days. The age at puberty and age at first calving varies from 18-24 months and 35-40 months, respectively. The inter-calving period in Mithun is 400 days. The expression of estrus behavior is silent in mithun unlike cattle it is difficult to detect heat in female mithun by clinical symptoms. The inbreeding is a common practice in hilly areas and efforts should be made to replace the breeding Bull preferably once in a 3-5 years. The ovulation takes place in mithun between 28-32 hours after the onset of estrus. It is common practice of tribal people to bring back the pregnant mithun just before

parturition and send it back to jungle after parturition. Common diseases in mithun

Like other bovines species mithun reared in semi-intensive system suffers from various infectious diseases like Tuberculosis, Para-tuberculosis, Brucellosis, Foot and Mouth disease (FMD), Infectious Bovine Rhinotracheitis (IBR), and Bovine Viral Diarrhea. (Rajkhowa et. al. 2003) which has tremendous detrimental effect on profitable mithun husbandry practices

Regular deworming, vaccination and treatment of ailing animal is required to be under taken to keep the animals healthy. Leech infestation is common in mithun, to under take the treatment of it application of common salt solution in nasal cavity or ether inhalation or Ivermectin injection. Death may occur due to leech infestation in mithun, other non infectious diseases like tympany, debility, anemia; hypovitaminosis are very commonly observed and needs proper attention and supplementation to over come these ailments. Mithun is endangered species and scientific rearing and research is required to be under taken to increase socio-economic status of tribal people in hilly areas of Northeastern region by increasing the production potential and performance of the animals. Further more emphasis should be undertaken to start with semi-intensive type of housing system by adopting better Managemental practices in mithun rearing (National Symposium on Buffalo for rural upliftment, 2006).

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