



Indigenous Community Based Rearing of Mithun- A Native Himalayan Cattle

(^{*}Plabita Goswami, Jayanta Kumar Chamuah, Bidyapati Thangjam, Trishita Banik and Girish Patil S)

ICAR-National Research Centre on Mithun, Nagaland, India-797 106

^{*}Corresponding Author's email: plabita.goswami@icar.gov.in

Mithun (*Bos frontalis*) is a semi-domesticated bovine found in the hilly and forested areas of Northeast India, such as Arunachal Pradesh, Nagaland, Manipur, and Mizoram. It is well adapted to the temperate and subtropical climate of the Indo-Himalayan region bordering countries like China, Myanmar, Tibet, and India. Community-based Mithun rearing refers to a collaborative approach where a group of individuals within a community collectively engages in the management, breeding, and overall care of a Mithun population. This emphasizes shared responsibility, knowledge exchange, and mutual support among community members involved in the Mithun-rearing process. It involves the integration of sustainable and environmentally friendly practices, ensuring the well-being of the livestock and the prosperity of the community intricately involved in the rearing of the vulnerable species.



Truth about the value of Mithun

Mithuns hold significant cultural and ceremonial value in many tribal communities. They are integral to traditional rituals, festivals, and various community events. Beyond their cultural importance, mithuns contribute to economic stability by providing income through their sale and related products, which helps in poverty reduction in the socio-economically backward tribal areas of the hilly region. Mithun also plays a role in food security by ensuring a local supply of meat and value-added meat products and delicacies during the festive occasions, and to a lesser extent for dairy products. Owning a mithun is regarded as wealth and prestige among the Galo tribe of Arunachal Pradesh. Mithun also holds great importance in marriage ceremonies; marriage is not complete in the Adi tribe of Arunachal Pradesh until the bridegroom's family offers the animal to the bride family (Bhasin, 2007). Due to the cultural norm of slaughtering the best bull at the time of marriages and social festivities, the conservation of the best genetic pool has become increasingly imperative. Traditional mithun rearing is not only preserving cultural traditions but also enhancing community market access and climate resilience. Mithun rearing promotes social cohesion and sustainable resource management, promoting the sharing of knowledge and expertise among community members. Preserving traditional Mithun rearing practices is essential for maintaining cultural heritage and ecological balance in the region.

Types of Mithun Rearing Practice

Traditionally, mithuns are raised in forests and allowed to forage on seasonal, native flora. In Arunachal Pradesh, three primary rearing systems are practiced: free-range, tethering, and lura. The free-range system is the most common, while tethering is used for treatment or adaptation. The lura system integrates agriculture, confining mithuns in community enclosures to prevent crop damage (Boruah et. al, 2018; Deka and Chatterjee 2015).

1. Tethering system to tackle the Mithun health crisis: The tethering system is a traditional practice widely employed for managing mithuns among the Adi, Apatani, Galo, Nyishi, and Tagin tribes of Arunachal Pradesh, particularly during health crises or when introducing animals to new environments. This method is also used in cultural contexts, such as during exchanges for marriage ceremonies or traditional gift-giving. In the tethering system, mithuns are secured to a fixed point, such as a tree or post, using a rope made from cane or plastic. For females, the rope is fastened around the neck, while for males, it is attached to their horns. The other end of the rope is anchored to a pole, limiting the animal's movement to a specific radius. This arrangement controls grazing by confining mithuns to defined areas, effectively preventing overgrazing in any single location. It also facilitates close monitoring of the animals' health, as they remain in proximity to their caretakers. Although the tethering system is effective in managing grazing and health, it requires careful planning to avoid issues like land degradation and overuse, particularly under current climatic stress conditions.

2. Free-range system allows Mithun to thrive in forests: In Arunachal Pradesh, the Tani groups, including the Adi, Apatani, Galo, Nyishi, and Tagin, typically raise mithuns in a free-range system, where Mithuns are allowed to roam freely in their natural habitat. In this system, mithuns graze freely across diverse landscapes like forests, grasslands, and hills area. This method leverages the region's vast environments, allowing mithuns to roam and forage naturally, which promotes their health compared to tethering. The system rotates grazing areas seasonally to prevent overgrazing and provides mithuns the freedom to explore for optimal feeding and resting spots. However, challenges include threats from predators such as wild dogs, tigers, and leopards. Despite these risks, natural foraging reduces the need for supplemental feeding. Health management relies on traditional practices, with regular checks and herbal remedies used to address issues. The free range system is culturally significant, integral to local traditions and ceremonies, and supports the community economically by providing essential products like meat and milk. This system balances traditional farming practices with environmental care by reducing the need for extra feed and aligns with local cultural practices.

3. Lura System, a Semi-Wild Habitat for Grazing Mithuns: Tagin, Nyishi, and Galo community tribes in Arunachal Pradesh practice community-based and welfare-oriented management practices of mithun called 'Lura. In the Lura system of mithun rearing, the responsibility for herding and caring for mithuns is shared collectively by the community, emphasizing communal management over individual ownership. Mithuns are kept in designated forest areas and unfenced agricultural plots. These areas are carefully chosen and then enclosed with fencing, typically completed within 1-2 months after winter ends. The fenced forest provides a semi-wild habitat where mithuns graze freely on natural grasses, shrubs, and leaves, with their diet supplemented through seasonal foraging. Health management in the Lura system is guided by traditional knowledge, utilizing herbal remedies and established practices. Mithuns are rotated between grazing areas to prevent overgrazing and ensure a sustainable supply of forage. Although the Lura system supports ecological balance and community welfare, challenges may occur due to deforestation and climate change.

Conclusion

Mithun rearing in the tribal communities shows how people merge their traditions and culture with economic needs and environmental preservations. Prioritizing these traditional practices with effective measures is important for preserving culture, supporting local economies, and protecting the environment. Adoption of a rearing system tailored in congruence with the modernization of the tribal communities can help sustain Mithun farming in the hilly terrains.

References

1. Bhasin, V. (2007). *The cultural ecology of Mithun in Arunachal Pradesh*. New Delhi: Kamla-Raj Enterprises.
2. Boruah, A., Saikia, P., Borah, B., & Deka, R. (2018). Mithun husbandry practices among tribes of Arunachal Pradesh. *Indian Journal of Animal Science*, 88(10), 1150–1156.
3. Deka, R., & Chatterjee, R. N. (2015). Mithun rearing practices in North Eastern Hill Region of India. *Indian Journal of Hill Farming*, 28(2), 75–81.