

MANAGEMENT OF DAIRY FARM DURING SUMMER

Dr. Ramsawroop¹ and Dr. Bhupendra Kaswan²

¹Assistant Professor (Animal Science), CCSHAU, CoA, Bawal Rewari

²Assistant Professor (Veterinary Science),
College of Dairy Science and Technology, Jobner, Jaipur



Managing dairy farms during the intense Indian summer can be a daunting challenge. As temperatures rise above 48°C in many parts of the country, dairy animals face significant heat stress, which adversely affects their health, productivity, and reproductive performance. Farmers must adopt proactive measures to ensure the well-being of their animals and sustain milk production during these harsh months.

One of the primary concerns during summer is the drastic reduction in feed intake by dairy animals. High temperatures suppress the appetite of cattle and buffaloes, leading to lower nutrient intake and, consequently, a decline in milk yield. Farmers can address this issue by offering highly palatable, easily digestible, and nutrient-dense feeds. Providing fresh green fodder like maize and sorghum can help maintain energy and water balance in the animals. Green fodder is rich source of potassium

which helps in combating heat stress. Chaffing the fodder and mixing it with concentrates or mineral mixtures ensures better consumption. Offering feed during the cooler parts of the day, such as early morning and late evening, encourages better intake.

Water plays a pivotal role in managing heat stress. Dairy animals need constant access to clean, cool water to maintain hydration. On hot days, an adult cow may consume up to 80 liters of water. Installing additional water troughs in shaded areas, cleaning them regularly, and ensuring an uninterrupted water supply is crucial. Some farms also use water sprinklers or misting systems to cool animals, especially during peak afternoon heat. Simple practices like wetting the floors or walls of the shed with water can significantly reduce ambient temperature and provide relief.

Providing proper shade is another critical aspect. Traditional brick sheds,



asbestos roofs, or tin sheets often trap heat and exacerbate animal discomfort. Ideally, dairy sheds should be open, well-ventilated, and preferably covered with thatch, bamboo, or other materials that reflect sunlight rather than absorb it. Trees planted around the farm act as natural coolants, providing shade and improving the microclimate. Temporary shading nets can also be erected over open areas where animals graze or rest during the day.

Another effective strategy is adjusting the herd's management schedule. Routine activities like milking, feeding, cleaning, and veterinary care should be carried out

during cooler hours. Reducing physical handling and movement during the afternoon helps minimize heat buildup in animals. Farmers must also keep an eye out for signs of heat stress, such as increased respiration rate, excessive drooling, open-mouth breathing, and reduced milk output. Immediate measures like moving affected animals to cooler areas, providing electrolytes, and seeking veterinary advice can prevent severe complications.

Summer stress also negatively impacts reproductive performance. Heat affects the hormonal balance, leading to silent heats, lower conception rates, and increased embryonic mortality.





Farmers should be cautious in breeding management during this period. Postponing artificial insemination to cooler months or choosing early morning hours for insemination improves the chances of successful conception. Maintaining optimum body condition through nutritional support and mineral supplementation is vital for reproductive health.

Hygiene and disease management cannot be overlooked during summer. Heat and humidity provide a breeding ground for pathogens, leading to mastitis, foot infections, and parasitic infestations. Regular cleaning of animal sheds, proper disposal of dung, and maintaining dry bedding are essential to prevent infections. Application of fly repellents and proper vaccination schedules must be followed meticulously to safeguard herd health.

Farmers should also focus on comfort-enhancing practices like installing fans, mist sprayers, or evaporative coolers in dairy sheds. While these require some investment, they pay off in terms of better animal welfare and sustained milk

production. Even simple modifications like increasing roof height, installing ridge vents, and using white lime on shed roofs to reflect sunlight can make a significant difference.

Adopting these summer stress management practices not only improves animal health and productivity but also enhances the economic viability of dairy farms. Several progressive farmers across India have demonstrated that with careful planning and relatively low-cost interventions, it is possible to beat the summer heat effectively.

In conclusion, managing summer stress in dairy farms is not just about protecting the animals from heat; it is about adopting a holistic approach that integrates feeding, housing, health care, and overall management. With proper planning, attention to animal needs, and timely interventions, farmers can ensure that their herds remain healthy, productive, and profitable even during the most challenging months of the Indian summer.