Feed supplement for sustaining milk production during summer

Loss of productivity in dairy animals in tropical and sub-tropical countries during summer months is a well-known menace. Due to heat and humidity stress animals are often panting. Their body temperature and pulse rate also increases. Consequently, feed intake declines significantly, which lowers milk production. This also affects the fertility and the conception rate in lactating animals. Climate change is likely to further aggravate the problem of heat stress.

Productivity loss due to summer stress can be minimized by providing well ventilated housing and improved management practices. But milk producers under smallholder production system with meagre income can hardly afford such facilities for their animals. Considering the need of the rural milk producers, the National Dairy Development Board has developed a feed supplement for sustaining milk production during summer months.

While introducing India's first-of-its-kind feed supplement, Shri Dilip Rath, Chairman NDDB said that the supplement has certain mineral salts which help in improving water retention, lowering pulse rate and body temperature with improved feed intake and milk production. This supplement has been field tested on animals.

Without summer supplement (in the month of May with average ambient temperature of 42 degree Celsius at 2 pm), the average daily milk yield declined by 0.8 litres per animal, whereas, on the contrary on feeding the supplement, daily milk yield increased by about 0.5 kg per animal. Additional daily cost of feeding the supplement would be less than ₹10 per animal, after taking all the costs into consideration.

Large scale use of this supplement during summer months, as such or through compound cattle feed, can greatly help in preventing reduction in milk (during the months of April to August) when the average Temperature Humidity Index (THI) is more than 75.

Cows in same shed under similar environment



Cow panting due to heat stress



Cow fed summer supplement