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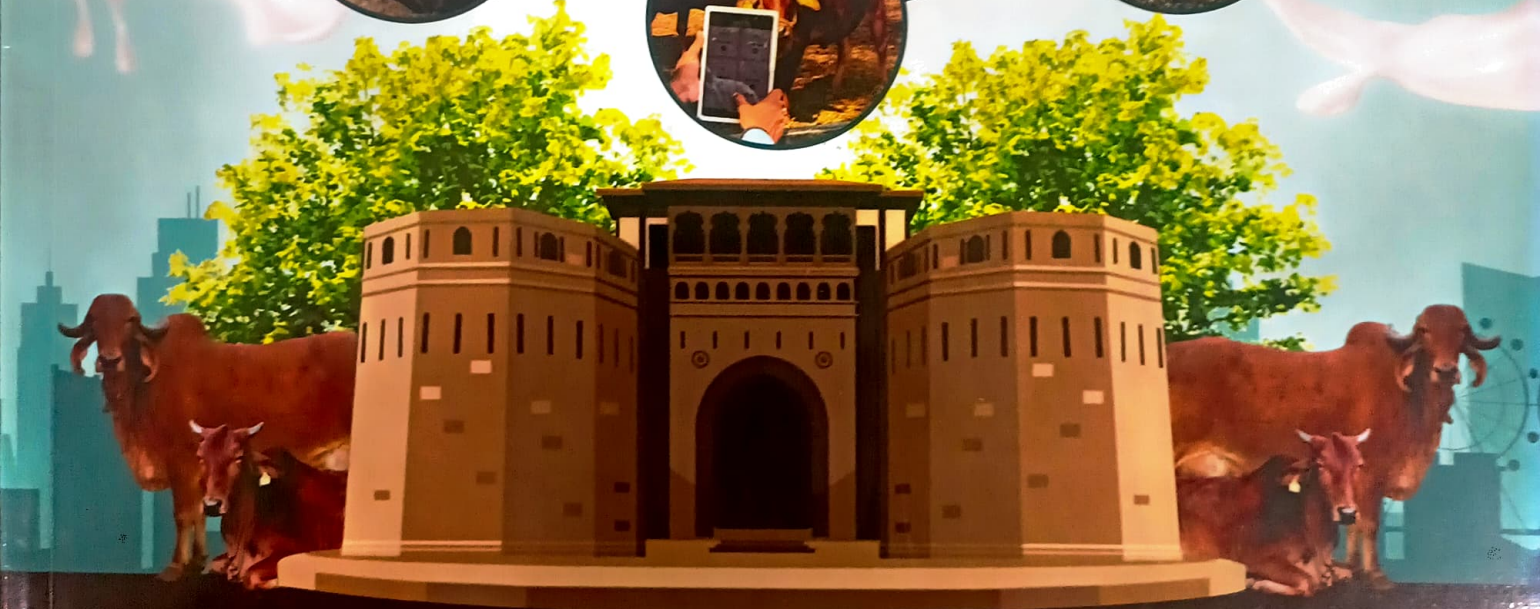

Indian Dairy Association

Indigenous Cattle Research Cum Training Centre, Agriculture College, MPKV, Pune

cells. Similarly, significant research is being conducted on the use of such LP treated milk in the creation of various milk products. Milk was treated by using hydrogen peroxide and potassium thiocyanate in 40:25 ppm proportion to enhance shelf life. Treatments T_0 – Preparation of khoa from fresh milk. T_1 – Preparation of khoa from SLE milk (10 Hrs storage). T_2 – Preparation of khoa from SLE milk (12 hrs storage).

Therefore, the purpose of the research was to determine whether LP treated shelf-life enhanced (SLE) milk could be used to prepare native desiccated milk products like khoa. Other goals included determining whether khoa could be prepared from SLE milk and comparing its physicochemical, microbiological, and sensory parameters to khoa prepared from fresh whole milk, as well as determining how long khoa would last at a storage temperature of 24±1°C. Finally, the cost of production was to be determined.

The study's findings indicate that khoa of good and acceptable quality may be made from LP-treated SLE milk that has been kept for up to 12 hours. When compared to khoa made from fresh milk, khoa made with SLE milk was comparable in practically all physicochemical, sensory, and microbiological aspects. When khoa is created this way, it costs a little more than when it is made using fresh milk. The findings support the idea that activating the LP system extends the shelf life of milk, and the khoa made from this milk is by no means inferior in quality.

Keywords: Lacto peroxidase, shelf life enhanced milk, dairy and khoa.

IDA-1062

ELEVATING DAIRY EXCELLENCE WITH PRECISION FEEDING FOR SUSTAINABLE EFFICIENCY AND PROFITABILITY IN COWS

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This research investigates the tangible outcomes of precision feeding on the sustainable improvement of efficiency and profitability in dairy cows, presenting numerical results derived from an extensive study conducted across multiple dairy farms. Precision feeding, involving customized nutrient management informed by data-driven technologies, serves as the focal point for evaluating its impact on key performance indicators.

Through a rigorous statistical analysis of the collected data, the study reveals compelling numerical results. Precision feeding implementation led to a notable 15% increase in average milk production per cow, concurrently reducing feed conversion ratios by 10%. These improvements translate into a substantial boost in overall herd efficiency and contribute significantly to the economic bottom line.

Furthermore, a detailed cost-benefit analysis showcases a 20% reduction in feed costs per unit of milk produced, emphasizing the economic advantages of precision feeding. These numerical findings underscore the efficacy of precision feeding in not only enhancing dairy cow performance but also fostering a more sustainable and profitable dairy farming paradigm.

In conclusion, the rich numerical findings presented in this research underscore precision feeding as a pivotal and quantifiable tool for optimizing efficie ncy, maximizing profitability, and fostering sustainability in modern dairy farming practices.

Keywords: Precision feeding, efficiency and profitability in cows.

IDA-1063

MANAGEMENT PRACTICES ADOPTED BY GOAT OWNERS OF SELF-HELP GROUP UNDER MAVIM UNDER AKOLA DISTRICT

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The data of 125 goat keepers belonging to SHG's under MAVIM were collected by personally interviewing with the help of pretested structure. The information about selected characteristics of goat keepers viz., age, education, family size, family type, flock size, occupation and annual income, sources of information, infrastructural facilities and sources of motivation, knowledge and adoption was summarized for concluding.

Finally revealed that majority of the goat keepers were young (49.60%) and middle-aged (48%) groups. Over one third of those were high schooled, notably cent percent goat keepers belonged to medium size family that too majority lives in joint family (52%). Majority of the goat keepers had medium flock size (2 to 4 goats) however goat keeping as major occupation with annual income between Rs. 27,000 to 54,000. So far as, the sources of information and infrastructural facilities are concerned about 76% goat owners had medium access to the sources of information and infrastructure facilities (60.80%), whereas, 64% respondent had medium sources of motivation.

Majority of the goat keepers had knowledge about feeding of leaves of bushes (100%), extensive method of rearing (35.20%) and type of housing (40.80%), goat insurances (64%) and duration of feeding of colostrum (84.80). However, majority of goat keepers lacking knowledge about heat symptoms, diseases of goats, feeding of concentrate to milking goat and breeding buck. The goat keepers in majority were found to be aware and adopting the practices of buck for natural services (100%), kaccha or packka type of housing (40.80%), extensive method of rearing (32.20%), feeding of leaves, colostrum feeding, goat insurance, but majority of them did not adopt the practices of selection of descript breeds of goat, feeding of concentrates of milking goat and breeding buck.

The important constraints reported by goat owners were non-availability of pure breeding buck, lack of knowledge about breeding practices, lack of knowledge about recommended housing requirements, non-availability of grazing area, and lack of knowledge about ways and means to overcome the constraints.

To overcome the constraints, it is proposed to train the goat owners of SHG about scientific management practices, educating the goat owners regarding the use of low-cost homemade ingredients and non-conventional feed. Additionally, it is recommended to develop pasture land at the Gram Panchayat level for the economic feeding of goats, providing loan facilities to goat owners for purchasing foods and fodders for the construction of sheds.

Keywords: Goat, management practices and SHG.

IDA 1064

CATTLE DISEASE PREDICTION USING MACHINE LEARNING TECHNIQUES

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The pivotal role of animal husbandry in India's agricultural development is underscored by its significance. However, farmers consistently face challenges due to the poor health of their livestock and a shortage of skilled veterinary professionals in their localities. Cattle often suffer from a range of external diseases, posing significant challenges to timely and accurate diagnosis and impacting global livestock health. There are efficiency and early detection limitations with the current diagnostic techniques.