

***"We never know
the value of the
moment until it
becomes a
memory"***

Guest Editor's Note



Dairy technology deals with the processing of milk and its products. Dairy technology study involves processing, storage, packaging, distribution, and transportation of dairy products by implying the science of bacteriology, nutrition, and biochemistry. If we talk about recent advancements, the industry has benefited many generations whether it is a dairy farmer or a retail seller. Many technologies are available for the enhancement of milk processing starting from the milking to the consumer hand. There could be one more revolution in India. The industry needs to target convenience and facilities. Dairy technology, microbiologist, chemist, and engineers work together to make the complete system default free. The real-time testing of milk, mechanized collection of milk, automated dairy plant operation, and so on. With the click of a button, one can now track data/ information at the farmer level in the milk pool. In addition, technology is making critical inroads to modernize and revolutionize the dairy sector's other major spheres.

Though the industry is very well stabilizing, its proper application is needed to assist the largely unorganized Indian dairy industry to structure itself better. Most of the pain points, or challenges experienced in handling a perishable commodity such as milk, can only be solved by using technology-based solutions. This special issue has many commendable articles including the value chain of milk, the potential of yak milk, shelf-life prediction, application of non-thermal technologies, packaging, etc.

I Congratulate the entire editorial and reviewers' team of Agritech Today Magazine for the wonderful special issue on dairy processing.

Preeti Birwal

Scientist(PFE)

***Department of PFE, Punjab
Agricultural University(PAU),
Ludhiana, Punjab, India.***

Message

Chitra Nayak

Principal Scientist
Dairy Engineering Section
ICAR–National Dairy Research
Institute, Karnal, Haryana, India.

The subject of dairy processing deals with the various stages involved in handling milk and its products, encompassing processing, storage, packaging, distribution, and transportation. It incorporates principles from dairy engineering, technology, microbiology, bacteriology, nutrition, and biochemistry, among others. Recent advancements in this field have brought significant benefits to both dairy farmers and retail sellers. A plethora of technologies has emerged, improving milk processing from milking to the end consumer. India's dairy industry appears to be on the cusp of another revolution, with a strong emphasis on convenience and upgraded facilities.

Collaboration among dairy technologists, microbiologists, chemists, and engineers is driving the creation of a seamless and efficient system. Key developments, such as real-time milk testing, mechanized milk collection, and automated dairy plant operations, are gaining prominence. Access to data and information at the farmer level has been streamlined, and ongoing technological innovations continue to modernize and revolutionize different aspects of the dairy sector.

One of the most significant challenges in dealing with perishable commodities like milk is being addressed through technology-based solutions. These advancements are crucial to improving the industry's efficiency and reducing wastage. The special issue of Agritech Today Magazine focusing on dairy processing includes insightful articles covering diverse topics such as the milk value chain, shelf-life prediction, non-thermal technologies, yak milk potential, and packaging. Congratulations to the entire editorial and reviewers' team for their valuable and relevant contributions to this commendable edition.

Chitranayak