TABLE OF CONTENTS

i	Editorial and Table of Contents	i-v
	Significance and Importance of Enzymatic Modifications of	
1	Milk Proteins	1
	Prince, Somveer, Dimple and Nitish	
2	Sustainable Strategies for the Dairy Industry Waste	
	Management and Repurposing	4
	Indumathi C., Krishnakumar P., N. Hariharan, B. O. Madhu, Ashok Suraj B. S.	4
	and S. Shanmugasundaram	
3	Rapid and Noninvasive Sensory Analyses of Food Products by	
	Hyperspectral Imaging: Recent Application Developments	8
	Preetham Gowda H. R., Ramesh V. and Amit Kumar	
4	Harnessing the Power of Yak Farming: The Path to Sustainable	
	Dairying	12
	Hijam Merina Devi, Sajesh Chettri, Indrajit Dalai, Dhamcho Dolma Bhutia and	
	Said Prashant Pandharinath	
_	High-Pressure Homogenization (HPH): Potential Applications	4.5
5	in the Development of Functional Dairy Foods	16
	Ramesh V., Amit Kumar and Preetham Gowda H. R.	
6	Sustainable Packaging Solutions for Dairy Products: Balancing	
	Environmental Impact and Consumer Preferences	20
	Sajesh Chettri, Hijam Merina Devi, Nongmaithem Seema Chanu, Said Prashant	
	Pandharinath and Indrajit Dalai	
7	Sustainable Packaging Strategies for Dairy Industry	24
	Utkarsh P. Deshmukh, Arundhati G. Wandhare and Shubham Kumar Sustainable Dairying: Nurturing the Earth and Nourishing	
8	Communities	29
	Rohit Bothra and Naveen Kumar	
	Significance of Pasteurization of Milk in Saving Energy	
9	Prince, Somveer, Dimple and Nitish	31
	Livestock Waste Management	22
10	Renuka Biradar, Vanishree S. and Aravind Rathod	33
	Role of Technology in Sustainable Dairying	25
11	Sonkar M.	37
12	Sustainable Practices of Dairying with Consumers Perceptions	
	Mary Khusboo Tirkey, Yogita Dhimar, Mahendra Baghel, Balram Sahoo,	40
	Soumya Dash, Mamta Choudhary and Binod Kumar Choudhary*	
13	Smart Dairy Farming for Sustainability	44
13	Manjit M. Khatal and Aniket A. Kale	44
14	Sustainable, Innovative and Successful Model Dairying: A Way	
	to Empower Rural People	47
	Ganesha B. H., Rajath Kumar, Ashwath Hegde, Jagadish M.R., Inamati S. S.	4/
	and Hanumath M.	
15	Silage- A Modern Approach for Cattle Feed	49
	Bhuvana K. and Kavin Raj S.	.,
16	Role of Milk and Milk Products in Cookery	53
	Vanishree S., Renuka Biradar and Aravind Rathod	
17	Fundamental Aspects and Principles in Promoting	
	Sustainability of Dairy Development in India	56
l	Mohan A. I. Maunica V and Shantilal I	1

18	Phages as Biocontrol Agents to Control and Detect Pathogens	60
	in the Dairy Industry	
	Arundhati G. Wandhare, Utkarsh P. Deshmukh, Shubham Kumar, Avinash	
	Chandra Gautam	
19	Good Agricultural Practices of Forage Crops: A Comprehensive	63
	Guide	
	Suheel Ahmad, Sheeraz Saleem Bhat, Nazim Hamid Mir and Atufa Regu	
20	Valorisation of Dairy Processing Wastes for Sustainable	69
	Industrial Practises	
	Aparnna V. P.	
21	Dairy Waste Management: One step ahead to Sustainable	72
	Dairying	
	Jayee Ali Sha, Mamta Vaishnav, Rushikesh Deshmukh and Shreya Saha	
22	The Pivotal Role of Indigenous Dairy Breeds in Sustainable	75
	Dairying in India	
	Ashish Yadav	
23	Creating a Carbon-Neutral Milk Future: Ensuring the Long-	78
	Term Viability of Our Dairy Industry and Protecting the	
	Environment	
	Ajay Shashikant Mahajan	
	Fogging Systems: A Sustainable Solution for Dairy Farms in	83
	Mitigating Climate Change Effects	
	Aniket A. Kale and Manjit M. Khatal	
25	Yak: A Unique Bovine Species of The Indian Himalayas	85
26	Khriengunuo Mepfhuo and Mihir Sarkar Embracing A Risk-Based Preventative Approach to Dairy Food	88
	Safety	
	A. Pramanik, S. Mondal, T. Roy, R. Vinchurkar and R. Deshmukh	
27	A Success Story of Tribal Rural Youth on Economic Upliftment	92
	Through Dairy Farming	
	Sagarika Borah, Tarun Kr Das and Monica Singh	
	Yak Milk Products: Local Product with Global Vista	94
28	Khriengunuo Mepfhuo and Mihir Sarkar	
20	A Deep Dive into Hygiene Practices in Dairy Processing	07
29	A. Pramanik, S. Mondal, T. Roy, B. Godara and B. Lakshmaiah	97
30	Recent Management Practices for Reducing Expenditure of	101
	Dairy Cattle Farming	
	Kalyan Sundar Das, Sayantani Mondal, A. Pramanik, S. Ghosh and Shyamal	
	Kumar Mondal	
31	Radiative Sky Cooling: Introduction and Prospective	105
	application in Dairy Industry	
	Robin Kaura and Mohit Singla	
32	Sustainable Dairy Farming: Empowering India's Agricultural	109
	Landscape	
	Mamta Vaishnav, Jayee Ali Sha, Rushikesh Deshmukh and Shreya Saha	
33	Sustainable Dairy Farming: Revolutionizing Forage Grass and	113
	Smart Irrigation in Indian Agriculture	
	Yogita Dhimar, Mary Khusboo Tirkey, Mahendra Baghel, Balram Sahoo,	
	Soumya Dash, Mamta Choudhary and Binod Kumar Choudhary	