

# DAIRY PLANNER

HARBIL/2004/22481

Title Code HARBIL00698

Vol. 21 | No. 01 | January - 2024

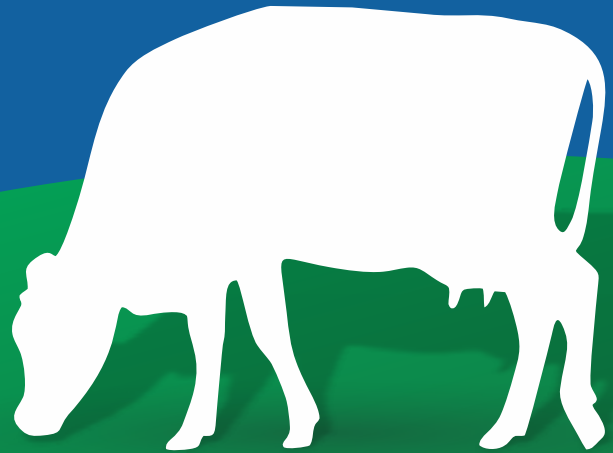


A NEW ERA FOR INDIAN  
DAIRY NUTRITION



**BOOST**  
YOUR **BRAND**  
**VISIBILITY**  
with us

With Over  
**45,000+**  
Readership



Advertise with us  
**Today**  
See your business  
**Growing**

The Magazine Covers all the latest news, articles, Product Launches, CSR, Press Releases, New Appointments, Latest Developments & a complete industrial overview.



# 5M+ Forte<sup>®</sup> Organic (CHELATED)

SUPERIOR QUALITY NUTRITIONAL  
SUPPLEMENT OF CHELATED  
MINERALS AND VITAMINS

**For Dairy Cattle, Sheep & Goat**



## COMPOSITION

Each 1Kg Contains :

Vitamin A	72,00,000 IU
Vitamin D3	77,000 IU
Vitamin E	275 mg
Nicotinamide	1200 mg
Zinc Glycinate	10000 mg
Manganese Glycinate	1800 mg
Magnesium Glycinate	6600 mg
Copper Glycinate	1600 mg
Ferrous Glycinate	1750 mg
Cobalt Glycinate	175 mg
Iodine as POTASSIUM IODIDE	360 mg
Calcium Glycinate	25.5%
Phosphorus	12.75%
Sodium	7 mg
Sulphur	0.72%
Potassium	110 mg
Chromium polypicconilate	300mg
Biotin	20mg

## BENEFITS

- Organic Chelated Minerals improve the important minerals bio-availability
- Effective in increasing Reproductive Performance
- For Improved Milk quality
- For better Health and Growth
- For the control of LAMINITIS in dairy cattle

## INSTRUCTIONS FOR USE

Daily Cattle : 50gm daily

Sheep & Goat : 5-10gm daily  
or as advised by Veterinarian.

## PACKAGING

5M+ Forte organic is available in  
1Kg/5Kg printed bags & Bulk Packs  
available.

## STORAGE CONDITIONS

To be stored in a cool, dry, dark place  
away from sunlight.



**BIOSINT<sup>®</sup>**  
NUTRITIONAL INNOVATIONS

For Further Details

**BIOSINT NUTRACEUTICALS,**

**Factory :** 19, Polupalli SIDCO Industrial Estate,  
Pillanakuppam PO, Polupalli Village,  
Krishnagiri - Hosur Highway,  
Krishnagiri - 635 115. TN, INDIA.

**Corporate Office :** 37, Krishna Nagar,  
KK Pudur 4th St, Coimbatore - 641 038.

Telefax : +91- 422 - 2430275, Mobile : 094435 17258

e-mail : [info@biosintnutraceuticals.com](mailto:info@biosintnutraceuticals.com)

[www.biosintnutraceuticals.com](http://www.biosintnutraceuticals.com)



# From the Pen of Chief Editor



## Mapping the Path Forward: Forecasting the Future of India's Dairy Industry in 2024

India's dairy industry is on the verge of significant growth and transformation, but it also faces various challenges. As the world's largest milk producer, the industry plays a crucial role in the country's agricultural economy and provides livelihoods to millions of people. However, changing consumer preferences, technological disruptions, and sustainability concerns are shaping the industry's future.

One key trend in the dairy industry is the increasing demand for value-added dairy products. With a growing middle class and higher disposable incomes, consumers are seeking healthier and more diverse options beyond traditional dairy products like milk and ghee. This presents opportunities for dairy companies to innovate and diversify their offerings, such as yogurt, cheese, and functional dairy foods.

Technological advancements are also revolutionizing dairy farming practices, improving productivity and efficiency. AI-driven analytics and automated milking systems are optimizing resource utilization and enhancing animal welfare. Biotechnology advancements, like precision breeding and genomic selection, hold promise for improving dairy cattle genetics and productivity.

However, the industry also faces challenges, particularly in sustainability. Environmental concerns and resource constraints are becoming more prominent, requiring sustainable production practices. Efficient resource utilization, waste management, and emissions reduction are crucial to mitigate the industry's environmental impact. Addressing issues like water scarcity, land degradation, and deforestation is also essential for sustainable dairy value chains.

Consumer preferences and market dynamics are evolving, with rising demand for organic, ethically sourced, and traceable dairy products. Meeting these expectations requires strict quality standards, transparency, and ethical sourcing practices throughout the value chain. Additionally, competition from plant-based alternatives necessitates innovation and differentiation to retain market share.

Government policies play a significant role in shaping the industry's future. Policies regarding milk procurement prices, subsidies, and trade regulations influence market dynamics and farmer livelihoods. Regulatory frameworks related to food safety, animal welfare, and environmental sustainability impact industry practices and consumer confidence. Creating an enabling policy environment that supports investment, innovation, and sustainable growth is crucial for long-term prosperity.

In conclusion, India's dairy industry in 2024 presents both opportunities and challenges. Technological innovations, changing consumer preferences, and sustainability concerns are reshaping the industry. By embracing innovation, promoting sustainability, and fostering inclusive growth, the industry can navigate these challenges and ensure its continued contribution to India's agricultural economy and food security. Collaborative efforts and strategic foresight from all stakeholders are necessary for a resilient and prosperous future.

*Vishal*

### OUR TEAM

**Vishal Rai Gupta**  
Editor-In-Chief  
vishal@pixie.co.in

**Siddhi Gupta**  
Co-Editor  
siddhi@pixie.co.in  
editor.pcsl@gmail.com

Website: [www.pixie.co.in](http://www.pixie.co.in)

Designed By Prince

### EDITORIAL BOARD MEMBER

**Dr. J Tamizhkumaran**  
M.VSc., PGDEP., Ph.D.  
(Ph. D in Veterinary & Animal Husbandry Extension Education)  
**Dr. Anjali Aggarwal**  
Principal Scientist  
**Dr. Sanjay K Latkar**  
Alembic Pharmaceuticals Ltd

**Dr. Manisha Singodia**  
(MVSc Veterinary Science, Jaipur)  
**Dr. Annanda Das**  
(Ph. D Scholar, WBUAFS, Kolkata)  
**Dr. M. Arul Prakash**  
(MVSc Assistant Professor, Tanjore)  
**Dr. B.L. Saini**  
(Ph. D IVRI, Izatnagar)

**Dr. Bilawal Singh**  
(MVSc, Assistant Professor  
Ludhiana)

Office :  
**Pixie Publication**  
Anand Vihar, near gogripur railway crossing, hanshi road, karnal-132001 (Haryana)

**Editorial Policy** is Independent. Views expressed by authors are not necessarily those held by the editors.

Registered as Newspaper by Register of Newspaper for India : **RNI No. HARBIL/2004/22481**

Editorial & Advertisements may not be reproduced without the written consent of the publishers. Whilst every care is taken to ensure the accuracy of the contents of **Dairy Planner**. The publishers do not accept any responsibility or liability for the material herein.

Publication of news, views and information is in the interest of positive Dairy industrial development in India. It does not imply publisher's endorsement. Unpublished material of industrial interest, not submitted elsewhere, is invited.

The Submitted material will not be returned.

Publisher, Printer : **Mr. Vishal Gupta** on Behalf of **Pixie Publication** Karnal.

Printed at : Jaiswal Printing Press, Chaura Bazar, Karnal-132001 (Haryana).

Published at : Anand Vihar, near gogripur railway crossing, hanshi road, karnal-132001 (Haryana)

**Editor-In-Chief: Mr. Vishal Rai Gupta**

All Legal matters are subject to Karnal.



# ADVERTISEMENT

<b>Biosint</b>	<b>03</b>
<b>Ecolex Animal Nutrition</b>	<b>01</b>
<b>Irides</b>	<b>31</b>
<b>Pixie Expomedia</b>	<b>02</b>
<b>The Livestock Expo</b>	<b>32</b>

# PRESS RELEASE

**Union Minister of Fisheries, Animal Husbandry, and Dairying Shri Parshottam Rupala inaugurates "Animal Health Conclave " (Pashu Swasthya Sammelan) in New Delhi** **16**



**Ceah Organises A Special Programme for Nabard Officers Across India** **18**



# ARTICLE

<b>Page 06</b>	<b>India's Dairy Sector: Navigating Opportunities Amidst Challenges in 2024</b> <i>Siddhi Gupta</i>
<b>Page 12</b>	<b>Nutritional Requirements of Different Stages of Sheep</b> <i>Mamta Laxmi</i>
<b>Page 14</b>	<b>Importance of Records in Goat Farm</b> <i>Karishma Choudhary and Vinod Kumar Palsaniya</i>

**21 Ecolex Animal Nutrition Making a Grand Entry into India**



<b>04 Editorial</b>	<b>30 Editorial Calendar</b>
<b>22 News</b>	<b>30 Subscription Form</b>







# India's Dairy Sector: Navigating Opportunities Amidst Challenges in 2024

**Siddhi Gupta**  
Co-Editor

The Indian dairy industry has been a cornerstone of the country's economy, providing livelihoods to millions of farmers and nourishment to its vast population. As we step into 2024, the industry finds itself at a crucial juncture, brimming with both opportunities and challenges. With a rapidly growing population, changing consumer preferences, technological advancements, and evolving regulatory frameworks, the Indian dairy sector must adapt and innovate to sustain its growth trajectory.

The key opportunities are based on rising demand from an expanding middle class with changing lifestyles and consumer preferences. Technological advancements are reshaping the Indian dairy industry by allowing for precision livestock farming, automating milking operations, optimizing farm management, improving processing capabilities, and ensuring transparency and traceability throughout the supply chain.

The Indian dairy industry has significant export potential due to abundant milk production, competitive cost structure, diverse product portfolio, rising demand in emerging markets, quality assurance measures, and government support. Government initiatives and policy support are critical in accelerating the growth, sustainability, and competitiveness of the Indian dairy industry. Continued collaboration among the government and industry stakeholders is required to achieve the vision of a vibrant, inclusive, and resilient dairy sector that contributes to the nation's economic prosperity and nutritional security.

## **Rising Demand for Dairy Products**

India's burgeoning population, along with increasing urbanization and rising

disposable incomes, continues to drive the demand for dairy products. As more consumers embrace Western dietary habits and lifestyles, there is a growing appetite for milk, yogurt, cheese, and other dairy derivatives. This trend presents a significant opportunity for dairy producers to expand their market presence and introduce value-added products to cater to diverse consumer preferences.

## **Changing Consumer Preferences**

India is witnessing a significant shift in consumer preferences towards healthier and more nutritious food choices. Dairy products, known for their high protein and calcium content, are increasingly being incorporated into diets as awareness about their health benefits grows.

## **Urbanization and Lifestyle Changes**

The rapid pace of urbanization, coupled with changing lifestyles and dietary habits, has fueled the demand for convenience foods. Urban consumers, with busy schedules and a penchant for on-the-go consumption, seek convenient and ready-to-eat dairy snacks. This urban demographic, characterized by higher purchasing power and exposure to global food trends, represents a lucrative market segment for dairy producers.

## **Health and Wellness Trends**

Growing health consciousness, particularly millennials and Gen Z, is driving the demand for functional dairy products with added health benefits. Products fortified with vitamins, minerals, probiotics, and omega-3 fatty acids are gaining traction as consumers prioritize holistic well-being and seek out nutritious alternatives. Additionally, the rising prevalence of lactose intolerance has spurred demand for lactose-free and

plant-based dairy alternatives, opening up new avenues for product innovation and market expansion.

### **Expanding Middle-Class Population**

The burgeoning middle-class population in India, characterized by rising disposable incomes and aspirations for a better quality of life, is fueling demand for premium dairy offerings such as organic milk, artisanal cheeses, and gourmet yogurt blends. Catering to this affluent consumer segment presents an opportunity for dairy producers to differentiate their brands and command higher price points.

### **Nutritional Security and Food Fortification Initiatives**

Government-led initiatives aimed at addressing malnutrition and promoting nutritional security have contributed to the increased consumption of dairy products in India. Schemes such as the Mid-Day Meal Scheme, Integrated Child Development Services (ICDS), and National Food Security Mission (NFSM) emphasize the inclusion of milk and dairy products in the diets of children and vulnerable populations to combat malnutrition.

### **Cultural Significance and Culinary Tradition**

Dairy products hold significant cultural and culinary importance in Indian cuisine, featuring prominently in traditional dishes and festive celebrations. Milk, ghee (clarified butter), paneer (Indian cottage cheese), and yogurt are integral ingredients in a myriad of regional delicacies and sweets. This cultural affinity for dairy products fosters a deep-rooted consumer preference and sustains demand across diverse demographic segments, transcending socioeconomic boundaries.

### **Technological Advancements**

The integration of technology across the dairy value chain has unlocked a plethora of opportunities for efficiency gains and product innovation. From automated milking systems and IoT-enabled farm management solutions to advanced processing techniques

and packaging innovations, technology is revolutionizing every aspect of dairy production.

### **Precision Livestock Farming**

Precision livestock farming (PLF) technologies, such as sensors, wearable devices, and monitoring systems, enable dairy farmers to monitor the health, behavior, and productivity of their livestock in real-time. These technologies provide valuable insights into animal welfare, reproduction cycles, feed intake, and disease detection, allowing farmers to make data-driven decisions to optimize animal husbandry practices and maximize milk yields.

### **Automated Milking Systems**

Automated milking systems (AMS) leverage robotics, sensors, and milking parlors equipped with robotic arms to automate the milking process without human intervention. AMS technology offers numerous benefits, including increased milking efficiency, reduced labor costs, improved udder health, and enhanced milk quality. By streamlining milking operations and optimizing resource utilization, AMS technology enables dairy farmers to boost productivity and profitability while maintaining high standards of animal welfare.

### **IoT-enabled Farm Management Solutions**

Internet of Things (IoT) platforms and farm management software empower dairy farmers to monitor and manage their operations remotely through connected devices and data analytics. IoT sensors installed in barns, milking parlors, and feeding systems collect real-time data on environmental conditions, animal behavior, milk production, and feed consumption. IoT-enabled farm management solutions enable farmers to improve herd management, resource utilization, and decision-making processes, leading to enhanced productivity and profitability.

### **Advanced Processing Technologies**

Technological advancements have revolutionized the production of value-added dairy products, including

yogurt, cheese, butter, and ice cream. High-pressure processing (HPP), ultra-high temperature (UHT) pasteurization, membrane filtration, and enzymatic modification are among the innovative processing techniques employed to enhance product quality, extend shelf life, and preserve nutritional value. Additionally, advances in packaging materials and techniques, such as aseptic packaging and modified atmosphere packaging (MAP), ensure product freshness, safety, and convenience while minimizing food waste.

### **Blockchain and Traceability Solutions**

Blockchain technology is being increasingly adopted to enhance transparency, traceability, and food safety throughout the supply chain. By creating immutable and tamper-proof records of product origin, production processes, and quality assurance parameters, blockchain enables end-to-end traceability from farm to table. Blockchain-based traceability solutions empower consumers to make informed purchasing decisions, build trust in dairy brands, and incentivize sustainable and ethical production practices across the industry.

### **Export Potential**

With its vast dairy herd and diverse product portfolio, India holds immense potential as a global dairy exporter. Rising demand for Indian dairy products in international markets, particularly in Asia, Africa, and the Middle East, presents a lucrative opportunity for industry players to capitalize on. By leveraging economies of scale, adhering to stringent quality standards, and forging strategic partnerships, Indian dairy exporters can tap into new markets and strengthen the country's position as a key player in the global dairy trade.

### **Abundant Milk Production**

India is the world's largest milk producer, accounting for a significant share of global milk output. With a vast and diverse dairy herd India boasts of abundant milk production capacity. This surplus production

serves as a solid foundation for meeting domestic demand while also creating opportunities for export to international markets.

### **Diverse Product Portfolio**

India's dairy industry offers a diverse portfolio of products ranging from traditional staples like liquid milk, ghee (clarified butter), and paneer (cottage cheese) to value-added products such as yogurt, cheese, and dairy-based desserts. This diverse product range caters to the varying tastes and preferences of consumers, allowing dairy producers to tap into multiple market segments and expand their offerings to meet demand.

### **Growing Demand in Emerging Markets**

Emerging markets in Asia, Africa, and the Middle East present significant growth opportunities for Indian dairy exports. Rising incomes, urbanization, and changing dietary preferences in these regions drive increased consumption of dairy products, creating a demand-supply gap that Indian exporters can fulfill. India's geographical proximity to these markets enhances its competitiveness in meeting the growing demand for dairy products.

### **Quality and Safety Assurance**

Indian dairy exporters are increasingly focusing on ensuring product quality, safety, and compliance with international standards and regulations. Investments in quality assurance systems, food safety practices, and adherence to certification programs such as ISO, HACCP, and FSSAI standards enhance the credibility and reliability of Indian dairy products in global markets.

### **Government Support and Export Incentives**

The Indian government provides various incentives and support measures to promote dairy exports. Export promotion schemes, financial assistance, market development initiatives, and trade facilitation measures are aimed at exploring new markets, expanding export volumes, and diversifying product portfolios.

### **Government Initiatives and Policy Support**

The Indian government's continued emphasis on dairy development through various schemes and initiatives has created a conducive environment for industry growth. Programs such as the National Dairy Plan and Operation Flood have played a pivotal role in augmenting milk production, enhancing dairy infrastructure, and empowering dairy farmers across the country.

#### **National Dairy Plan (NDP)**

Launched by the Government of India with the support of the World Bank, the National Dairy Plan aims to enhance milk productivity and increase the incomes of smallholder dairy farmers. The plan focuses on genetic improvement of dairy animals, enhancing feed and fodder availability, strengthening dairy infrastructure, and improving milk quality and marketing systems.

#### **Operation Flood**

Operation Flood, launched in the 1970s, remains one of the most successful dairy development programs in India's history. The program aimed to increase milk production, augment rural incomes, and establish an efficient milk marketing network. Through the creation of dairy cooperatives, investment in dairy infrastructure, and implementation of innovative marketing strategies, Operation Flood transformed India from a milk-deficient country to the world's largest milk producer.

#### **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)**

The PM-KISAN scheme provides direct income support to small and marginal farmers, including dairy farmers, to supplement their financial resources and improve their livelihoods. Under the scheme, eligible farmers receive fixed income support of Rs. 6,000 per year, disbursed in three equal installments, directly into their bank accounts.

#### **Dairy Entrepreneurship Development Scheme (DEDS)**

The Dairy Entrepreneurship

Development Scheme, implemented by the Ministry of Animal Husbandry, Dairying, and Fisheries, aims to promote entrepreneurship and investment in the dairy sector. The scheme provides financial assistance and technical support to individuals, self-help groups, and cooperatives for setting up modern dairy farms, milk processing plants, and dairy product manufacturing units.

#### **National Programme for Bovine Breeding and Dairy Development (NPBBDD)**

The NPBBDD focuses on genetic improvement of bovine breeds, including indigenous and exotic breeds, to enhance milk productivity and breed quality. The program promotes the use of superior germplasm, artificial insemination (AI) services, and breed upgradation techniques to enhance the genetic potential of dairy animals.

#### **Quality and Safety Regulations**

The Food Safety and Standards Authority of India (FSSAI) plays a crucial role in ensuring the safety and quality of dairy products through regulatory oversight and enforcement of food safety standards. FSSAI establishes standards for milk and dairy products, regulates food labeling and packaging requirements, and monitors compliance with hygiene and sanitation standards along the dairy value chain.

Addressing the dairy industry's productivity and quality concerns requires a comprehensive approach that includes improved animal husbandry practices, improved feed and fodder management, systematic breed improvement efforts, adherence to hygiene and sanitation standards, and strong quality assurance systems. It is critical to focus efforts on cold chain infrastructure, transportation and logistics, last-mile connectivity, quality control and traceability mechanisms, and supply chain stakeholder capacity building.

Another barrier to implementing sustainable farming practices is investing in eco-friendly technologies to reduce its environmental footprint,



improve climate resilience, and contribute to the long-term sustainability of food systems and natural ecosystems. Furthermore, market competition and price volatility pose significant challenges to the Indian dairy industry, necessitating proactive risk-mitigation strategies, increased competitiveness, and market resilience.

### **Productivity and Quality Concerns**

Despite being the world's largest milk producer, India grapples with productivity and quality challenges in its dairy sector. Low milk yields per animal, inadequate feed and fodder resources, inefficient breeding practices, and suboptimal hygiene standards often hinder the industry's potential. Addressing these issues requires concerted efforts towards enhancing animal husbandry practices, promoting scientific dairy farming techniques, and investing in research and development to improve breed quality and nutrition management. Here's a closer look at the key factors contributing to productivity and quality concerns, along with potential strategies to mitigate them.

#### **Low Milk Yields per Animal**

One of the primary productivity challenges in the Indian dairy sector is the low milk yields per animal, especially among indigenous breeds. Factors contributing to low milk productivity include inadequate nutrition, suboptimal breeding practices, limited access to veterinary care, and poor management practices. Promoting the adoption of high-yielding crossbred and improved indigenous breeds, along with providing extension services and training programs, can help enhance milk production per animal and improve overall productivity on dairy farms.

#### **Feed and Fodder Management**

Inadequate availability of nutritious feed and fodder, especially during lean seasons, affects the nutritional status of dairy animals and leads to suboptimal milk production. To address feed and fodder shortages,

dairy farmers can adopt strategies such as crop diversification, forage cultivation, silage making, and fodder conservation techniques. Promoting integrated farming systems, agroforestry, and sustainable land management practices can improve feed and fodder availability, enhance soil fertility, and ensure long-term sustainability of dairy farming operations.

#### **Breeding and Genetics**

The prevalence of low-yielding indigenous breeds and limited access to superior germplasm pose challenges to breed improvement efforts. Dairy farmers can adopt systematic breeding programs, utilize artificial insemination (AI) services, and access superior bull semen for breed upgradation. Government-led initiatives such as the National Programme for Bovine Breeding and Dairy Development (NPBBDD) aim to promote breed improvement through genetic enhancement, breed conservation, and breed resilience initiatives.

#### **Hygiene and Sanitation Standards**

Maintaining hygienic milk production and handling practices is essential to ensure the safety and quality of dairy products. To address hygiene and sanitation concerns, dairy farmers need to implement best management practices, such as proper cleaning and sanitization of milking equipment, hygienic handling of milk, and adherence to milk quality standards. Training programs, extension services, and regulatory enforcement can help raise awareness and promote compliance with hygiene and sanitation standards across the dairy value chain.

#### **Quality Assurance and Testing**

Quality assurance systems and testing protocols play a crucial role in ensuring the quality and safety of dairy products. Lack of access to reliable testing facilities, inadequate quality control measures, and inconsistent adherence to quality standards pose challenges to maintaining product quality and consistency. Strengthening regulatory oversight, enforcing quality

standards, and promoting industry-wide adoption of quality management systems can enhance product quality and consumer confidence in Indian dairy products.

#### **Supply Chain Infrastructure**

The lack of robust cold chain infrastructure, as well as logistical inefficiencies, present significant challenges to the Indian dairy industry. Inadequate storage facilities, transportation constraints, and perishability issues cause post-harvest losses and jeopardise product quality and safety. Improving supply chain infrastructure is critical for increasing efficiency, reducing waste, and ensuring dairy product quality and safety in India's dairy industry. Here's an in-depth look at supply chain infrastructure challenges and opportunities, as well as potential improvement strategies.

#### **Cold Chain Infrastructure**

One of the primary challenges in the Indian dairy supply chain is a lack of adequate cold chain infrastructure. Maintaining the cold chain is critical for preserving the freshness and quality of dairy products, particularly perishables like milk and dairy derivatives. To address this issue, cold chain infrastructure, such as cold storage warehouses, refrigerated trucks, and cold chain logistics hubs, must be upgraded. Public-private partnerships (PPPs), incentives for private sector investment, and government subsidies for cold chain development can all help to speed up the expansion of cold chain infrastructure along the dairy supply chain.

#### **Transportation and Logistics**

Transportation inefficiencies and logistical bottlenecks disrupt the smooth flow of dairy products from farm to market. The lack of specialised transport vehicles for perishable goods exacerbates the issue, resulting in quality deterioration and product spoilage. To address these issues, investments in road infrastructure improvements, the construction of dedicated dairy corridors, and the deployment of

refrigerated transport fleets are critical. Using technology solutions such as GPS tracking, route optimisation software, and real-time monitoring systems can help improve fleet management, optimise logistics operations, and ensure dairy products are delivered on time to customers.

### **Last-Mile Connectivity**

Providing efficient last-mile connectivity is critical for reaching remote and underserved areas, particularly in rural and semi-urban areas. Inadequate distribution networks, limited access to retail outlets, and fragmented market linkages all impede dairy product penetration in these areas, limiting market access and revenue potential. Initiatives such as decentralised collection centres, milk ATMs, and community-based distribution models can help to improve product accessibility and availability in remote areas. Leveraging digital platforms, e-commerce channels, and mobile-based distribution networks can also help with direct-to-consumer sales and market penetration.

### **Quality Control and Traceability**

Maintaining quality control and ensuring traceability throughout the dairy supply chain is essential for safeguarding product integrity and consumer trust. However, the lack of standardized quality assurance practices, inconsistent adherence to hygiene and safety standards, and limited traceability mechanisms pose challenges to ensuring product quality and safety. Implementing quality management systems, conducting regular inspections and audits, and establishing traceability systems using technologies such as barcoding, RFID tags, and blockchain can enhance transparency and accountability in the supply chain.

### **Capacity Building and Skill Development**

Building the capacity and enhancing the skills of supply chain personnel, including farmers, transporters, warehouse operators, and retailers, is essential for improving supply chain

efficiency and performance. Public-private partnerships, industry associations, and academic institutions can collaborate to design and deliver training programs tailored to the specific needs of the dairy supply chain workforce, ensuring the adoption of standardized practices and compliance with regulatory requirements.

### **Sustainability and Environmental Concerns**

The intensive nature of dairy farming contributes to environmental degradation, such as deforestation, greenhouse gas emissions, and water contamination. As consumers, regulators, and investors increasingly prioritise sustainability, the Indian dairy industry is under pressure to adopt environmentally friendly practices and reduce its carbon footprint. Implementing sustainable farming practices, promoting resource efficiency, and researching alternative energy sources can all help to reduce environmental impacts while ensuring long-term viability. Here's an in-depth look at the sector's sustainability challenges and opportunities, as well as potential solutions.

### **Resource Efficiency**

Dairy farming is a resource-intensive industry that requires large amounts of land, water, feed, and energy. Inefficient resource use and unsustainable farming practices can cause environmental degradation, such as land degradation, water scarcity, and deforestation. To reduce water consumption, dairy farmers can use techniques such as rainwater harvesting, efficient irrigation, and water recycling. Implementing sustainable land management practices, such as agroforestry, soil conservation, and crop rotation, can improve soil health, increase biodiversity, and reduce land degradation. Optimising feed and fodder management, reducing feed waste, and promoting feed alternatives such as crop residues and agro-industrial byproducts can help dairy farmers reduce their environmental impact.

### **Climate Change Mitigation**

Climate change creates significant challenges for the dairy industry. Dairy farming contributes significantly to greenhouse gas emissions, particularly methane from enteric fermentation and nitrous oxide from manure management. Dairy farmers can use climate-smart agricultural practices like agroforestry, conservation agriculture, and renewable energy to reduce emissions, sequester carbon, and increase climate resilience. Investing in climate-resilient dairy infrastructure, such as heat stress mitigation for livestock and climate-controlled barns, can also assist dairy farms in adapting to changing climatic conditions and reducing production losses.

### **Waste Management and Circular Economy**

Dairy farming produces large amounts of organic waste, such as animal manure, wastewater, and byproducts from milk processing, which can pose environmental problems if not properly managed. Dairy farmers can promote a circular economy by using waste-to-energy technologies like biogas digesters and anaerobic digesters, which convert organic waste into renewable energy and biofertilizers. Implementing integrated nutrient management systems, such as composting and vermicomposting, can recycle nutrients from organic waste, increase soil fertility, and reduce environmental pollution. Collaboration among dairy stakeholders, local communities, and government agencies is critical for developing and implementing effective waste management strategies that promote sustainable dairy production practices.

### **Biodiversity Conservation**

Dairy farming has implications for biodiversity conservation, as it often involves land conversion, habitat fragmentation, and loss of biodiversity-rich ecosystems such as forests and wetlands. Protecting and restoring biodiversity in and around dairy farms is essential for maintaining ecosystem services, enhancing resilience to climate change, and safeguarding biodiversity hotspots. Adopting agroecological

farming practices, such as agroforestry, mixed cropping, and biodiversity-friendly farming, can promote habitat conservation, enhance species diversity, and support ecosystem functions.

### **Certifications and Standards**

Certifications and standards play a crucial role in promoting sustainability and environmental stewardship in the dairy industry. Certification schemes such as organic certification, Fair Trade certification, and sustainability standards provide frameworks for assessing and verifying the environmental, social, and economic performance of dairy farms and supply chains. Adhering to certification requirements, implementing best management practices, and undergoing regular audits and inspections can help dairy farmers demonstrate their commitment to sustainability and access premium markets for sustainably produced dairy products.

### **Market Competition and Price Volatility**

The Indian dairy industry operates in a highly competitive market characterized by price volatility and fluctuating demand-supply dynamics. Competition from imported dairy products, as well as domestic players, exerts downward pressure on prices, squeezing profit margins for farmers and processors alike. To navigate these challenges, industry stakeholders must focus on enhancing operational efficiency, diversifying product portfolios, and adopting risk management strategies to mitigate price volatility risks. Here's a detailed exploration of the factors contributing to market competition and price volatility, along with potential strategies to mitigate these challenges.

#### **Increased Competition from Imports**

The Indian dairy market faces competition from imported dairy products, including milk powder, butter, cheese, and dairy derivatives, which are often cheaper due to subsidies, economies of scale, and lower production costs in exporting countries. To address competition from

imports, the government can implement trade policies, tariffs, and import quotas to protect domestic dairy producers from unfair competition while promoting self-sufficiency and market access.

#### **Price Volatility in Global Markets**

Global dairy markets are characterized by price volatility, driven by factors such as changes in supply and demand dynamics, weather events, currency fluctuations, trade policies, and geopolitical tensions. To mitigate the impact of price volatility, dairy stakeholders can adopt risk management strategies, such as forward contracts, futures trading, and price hedging mechanisms, to hedge against price fluctuations and stabilize revenue streams. Diversifying product portfolios, exploring niche markets, and adding value through product differentiation can reduce reliance on volatile commodity markets and enhance resilience to price shocks.

#### **Competitive Pressure from Domestic Players**

Indian dairy industry faces intense competition from domestic players, including large dairy cooperatives, private dairy companies, and regional dairy processors. Market saturation, overcrowding, and aggressive pricing strategies contribute to heightened competition, squeezing profit margins for dairy stakeholders and challenging market positioning. Focus on product innovation, brand differentiation, and value-added offerings to capture consumer preferences and create a unique market proposition, whereas, strengthening distribution networks, investing in marketing and branding initiatives, and fostering customer loyalty through quality assurance and service excellence help in maintaining a competitive edge in the market.

#### **Regulatory Constraints and Policy Uncertainty**

Regulatory constraints and policy uncertainty, including changes in government policies, taxation, and trade regulations, can impact market dynamics and create uncertainty. To address regulatory challenges,

stakeholders can engage with policymakers, industry associations, and regulatory authorities to advocate for transparent, predictable, and business-friendly regulations that support market growth and investment. Collaboration among government agencies and industry stakeholders can facilitate policy dialogue, regulatory reform to create an enabling environment for sustainable dairy industry development.

#### **Supply-Demand Imbalance and Seasonality**

Supply-demand imbalances and seasonal fluctuations in milk production pose challenges to market stability and pricing dynamics. Milk production tends to peak during the flush season, leading to oversupply and downward pressure on prices, while demand remains relatively stable throughout the year. This imbalance between supply and demand exacerbates price volatility, affecting the incomes of dairy farmers and processors. Investing in milk processing capacity, storage infrastructure, and value-added product development can also help absorb excess milk during surplus periods and meet demand during lean seasons, enhancing market stability and profitability.

#### **Conclusion**

The Indian dairy industry stands at a crossroads, poised to capitalize on unprecedented opportunities while confronting formidable challenges in its path to growth and sustainability. By embracing technological innovations, strengthening supply chain infrastructure, promoting sustainability, and fostering collaboration among stakeholders, the industry can unlock its full potential and emerge as a global powerhouse in the years to come. With strategic foresight, proactive policymaking, and collective action, the Indian dairy sector can chart a course towards a prosperous and resilient future, fulfilling its dual mandate of economic prosperity and nutritional security for the nation.





# Nutritional Requirements of Different Stages of Sheep



**Mamta Laxmi**  
M.V.Sc Scholar, Animal Nutrition Department, RAJUVAS, Bikaner

Sheep nutrient requirements - Sheep require essential nutrients in their feed like Water, Protein, Energy, Minerals ,Vitamins.

1. Water - Normally a sheep drink approximate 2-3 litres of water for every kg of dry feed consumed. Sheep can tolerate salt content up to 1% in drinking water.
2. Dry matter - Adult sheep require 2.5 to 3% of their body weight, Lactating sheep require 4% of their body weight and Lambs require 4 to 5% of the body weight.
3. Protein - A level of 10% protein in the ration has been found to be adequate for wool production. DCP requirement is 2.73g per kg metabolic body size.[maintenance] the approximate daily requirement for maintenance is 1/10th of TDN. This requirement increases by about 50% during pregnancy and 100% during lactation and growth. N : S ratio should be maintained 10:1 in ration.
4. Energy or TDN Requirement- An abundance of good roughage alone will supply sufficient TDN. But in case of pregnant ewe and fattening lambs, and milking ewes additional concentrate mixture should be given to satisfy their energy requirements.
  - TDN Requirement - 27.3g /kg w0.75 [maintenance] As a thumb rule a non-pregnant, non lactating ewe requires 10gm TDN per kg live body weight for maintenance and wool production. This requirement will be 50% more during last 6 weeks of pregnancy and the first 10 weeks of lactation.

<b>Nutrient requirement for maintenance of sheep [SK Ranjan, 1998]</b>			
<b>Live weight [kg]</b>	<b>Dry matter [g]</b>	<b>DCP[g]</b>	<b>TDN [g]</b>
25	678	33	305
30	775	38	350
35	873	43	393

5. Minerals : They require macro and micro minerals in diet.

Macrominerals like Na, Cl, Ca, P, Mg, K & S

- Sodium chloride - It is added at the rate of 0.5% in complete ration or 1% in concentrate ration
- Micro/trace - Co, Cu, Zn, Fe, I, Mn, Mo, Se, Zn, F
- Vitamins - vitamin A, vitamin D, vit.E usually adequate in diets containing high quality forage. The B complex vitamins are synthesized in the rumen by microbial action.

Colostrum is important requirement for feeding of new born lamb.

Creep feeding - It start from 10 days of age to weaning at 90

days. It help to promote growth during early age and rumen development. Creep feeds DCP is 17.4% and TDN is 73%.

- feeding of growing - finishing lambs from weaning to slaughter- Such type of feed contain DCP of 13% and TDN of 70%
- Feeding schedule  
Feeding of pregnant ewes during last 6weeks of gestation - Good quality forage [cereal fodders 6% DCP and 60% TDN, grasses 6% DCP and 55%TDN.] and a concentrate mixture.
- Feeding of lactating ewe - dry matter consumption may

go up to 4% of body weight.

- Fed liberally with good quality of forage and concentrate mixture. Concentrate mixture can gradually be diminished after 8 to 10 weeks and can be stopped after 12-13 weeks of lambing.

Flushing = it is the special nutritional care for improving nutritional Status of ewes 3-4 weeks before mating by providing additional Concentrate mixture.

- Increase incidence of oestrus and increased ovulation rate.

B w [kg]	Concentrate mixture,g/d	Roughage,g/d	TDN [g]	Remarks
12-15	200	400	305	8 hour grazing can be substituted in place of roughage
16-25	250	600	350	
26-35	300	700	393	





**Karishma Choudhary and Vinod Kumar Palsaniya**

M.V.Sc. Scholar, LPM Department,  
CVAS, Navania, Vallabhnagar, Udaipur

# Importance of Records in Goat Farm

Goat rearing is one of the major contributors to the animal husbandry sector of our country. Goat farming is an extremely profitable and sustainable business due to goats are hardy in nature, adopt to various climatic conditions. Goats are prolific breeders, and their gestation period lasts for only five months. Goats are reared for milk, meat as well as fiber.

## Outputs from Goats-

India is the world's largest producer of goat milk and third-largest producer of goat meat. According to 20th livestock census (DAHDF, 2019) Goat population in India is 148.88 million, increased by 10.1 % over the previous census. About 27.8% of the total livestock is contributed by goats. Goat milk contributes 3.3 % of total milk production of India in 2022-23. Goat meat contributes 14.47 % of total meat production in our country (Basic Animal Husbandry Statistics, 2022-23)

These all data maintain in records by farmers and other organized goat farm.

## Importance of Records-

1. A record is an accounting of events or data. Actually, records do very little except to remind one of an event.
2. Records must be processed or summarized in order to

provide information.

3. Good records are needed to serve as the basis for sound management decisions.
4. The farmer must have records for evaluation, planning, coordination and execution of farm activities.
5. Recording can be done most easily if animals have some form of identification. Thus, animals recording and identification are inseparable.
6. Good farm records should contain information of essential parameters, must be easy and simple to understand and should have systematically arranged continuous information.

## Types of records

Records can be maintained in many ways. Following kinds of records can be maintained at a goat farm-

- History card and pedigree records.
- Reproduction and Production records- provide details of individual ewe or doe performance like fertility, prolificacy, rearing and mothering ability and milk production estimated through kid growth rate to a given age. Feed consumption records- it is difficult to estimate due to grazing behavior, but some







## Union Minister of Fisheries, Animal Husbandry, and Dairying **Shri Parshottam Rupala** inaugurates "Animal Health Conclave " (Pashu Swasthya Sammelan) in New Delhi

### **Conclave organized for shaping Animal Health sector with Innovative Vaccine and Precision diagnostics, marks a pioneering exploration of cutting-edge vaccines and precision diagnostics in the animal health sector**

Union Minister of Fisheries, Animal Husbandry, and Dairying, Shri Parshottam Rupala inaugurated the "Animal Health Conclave "(Pashu Swasthya Sammelan) today in New Delhi, marked a pioneering exploration of cutting-edge vaccines and precision diagnostics in the animal health sector. The Department of Animal Husbandry and Dairying and Indian Immunological Limited (IIL) jointly organized the conclave for shaping Animal Health sector with Innovative Vaccine and Precision diagnostics.

In his address, Shri Parshottam Rupala highlighted the significance of "One Health" concept, which is deep-rooted in the Indian tradition and culture exemplifying the interconnectedness of all living beings. He echoes the concept of "Vasudhaiva Kutumbakam,"

meaning the world is one family, underscores the importance of harmonious coexistence and interconnectedness among humans, animals, and the environment. He further highlighted India's substantial vaccination endeavours and the dedication to eliminating major diseases, the initiatives in pandemic preparedness and the One Health approach which plays a crucial role in ensuring the well-being of both animal and public health.

Speaking on the occasion, Animal Husbandry Commissioner Dr. Abhijit Mitra stated that the upcoming time is crucial for the country and he emphasized the need for preparedness with vaccines for the prevention of diseases among livestock. He urged vaccine manufacturers to produce cost-effective and efficient vaccines using newer and innovative technologies and vaccine platforms, enabling livestock farmers to access and utilize them.







Chairman and Managing Director of NDDB and IIL Shri Meenesh Shah highlighted the challenges in the Indian livestock and vaccination during the Animal Health Conclave. The Animal Health Conclave hosted technical sessions, covering topics such as the WHO-PQ Process in Animal Health, Decarbonization of Vaccine Manufacturing, AI's (Artificial Intelligence) role in disease prevention, Antimicrobial Resistance (AMR) Public Health Policy in the One Health framework, and Modern Approaches to Animal Diagnostics for Field Deployment, shaping the sector with innovation and precision.

The conclave focused on fostering dialogue and collaboration among esteemed speakers and experts to enhance

animal health. The technical sessions were the core of the event, featuring in-depth discussions on new vaccine technology, the decarbonization of vaccine manufacturing, AMR Management with the One Health Approach, AI applications in disease surveillance, and modern approaches to diagnostics for field deployment.

This successful event brought together experts, policymakers, and stakeholders, charting a progressive path for the animal health sector. The exchange of knowledge and ideas holds promise for advancements in vaccine technology, diagnostics, and the overall well-being of animals.







Chief Guest Address

## Ceah Organises A Special Programme for Nabard Officers Across India

Centre of Excellence for Animal Husbandry, Hessarghatta, Bengaluru – CEAH Academy organized special training programme “Financing of Animal Husbandry Production & Processing Activities” for NABARD officers representing across India from 26th to 28th December, 2023. The officers were deputed through NABARD - National Banking Staff College (NBSC), Lucknow. Dr. Sudharsan, DGM, NABARD-NBSC Lucknow and Dr. Esakkimuthu, DGM, NBSC Lucknow coordinated in deputing 26 officers from Asst. Manager, Manager and upto AGM grades.

The inaugural function of the programme was graced by Mrs. Brindha, General Manager, NABARD Karnataka Range, Prof. K.C. Veeranna, Vice Chancellor, KVAFSU, Karnataka and Dr. Vasappa, DGM and Head, Union Bank Knowledge Centre, Bengaluru. They all appreciated the joint venture of NABARD and CEAH in exploring entrepreneurship opportunities in Animal Husbandry Sector with various business models in Dairy, Poultry, Sheep & Goat, Piggery etc.

The three day sessions involved a

packed schedule from morning 9.30 am to 7.00 pm comprising technical sessions, sandwiched with visits followed by experiential sharing in various sectors. Their accommodation was organized at “Our Native Village Resort” Hessarghatta.

On day one, 26th December, 2023, Dr. Mahesh P.S., Joint Commissioner & Director, CEAH briefed about overall status of Indian Animal Husbandry Sector contributing about 15 lakh crores to the national GDP. Dairy Sector contributes 10 lakh crores with about 10 crore people being employed, Poultry contributes about 2 lakh crores followed by Small Ruminants and other sectors contributing 3 lakh crores. He further narrated various entrepreneurship opportunities in Animal Husbandry Sector.

Both faculty of NBSC, Dr. Sudharsan, DGM, NABARD-NBSC Lucknow and Dr. Esakkimuthu, DGM, NBSC Lucknow presented topics from Techno-economic aspects of Animal Husbandry Projects and financing of Animal Husbandry Activities – Role of NABARD. Prof. Vivek M. Patil, Associate Professor, KVAFSU gave a business prospective of

various models in Animal Husbandry sector. Dr. Narahari, Project Consultant explained in detail about opportunities in poultry processing sector with ideal project financials for 1000 birds per hour processing plant. This was followed by visit to Milk Cooperative Society Hessarghatta, coordinated by Dr. H. Teggi and Dr. Balraj. During this visit the NABARD officers were exposed to operations of milk collection, bulk milk cooler and other supply chain management of Dairy Cooperatives in Karnataka.

On day two, 27th December, 2023, the NABARD officers were taken a field visit at 7.00 am to Desi cow unit established by a Chartered Accountant with 550 Desi Cows in one acre area at Kakolu near Hessarghatta. NABARD officers appreciated the great skill and enthusiasm of the entrepreneur for converting it into a very good business model in desi dairy sector.

The technical sessions started at 9.30 am with every session being punctually restricted for 30 to 40 minutes. The first session was from Mr. Ashok Kumar, MD, MAA integrators sharing of experience of his venture into various



**Dr. Mahesh PS speaking**

sectors of Agriculture and allied agriculture fields. He narrated his journey of borrowing and successfully repaying upto 150 crores financial assistance from banks. Presently he is actively involved in poultry entrepreneurship.

This session was followed by Dr. Mahesh Kumar, Professor & Head, Dairy Engineering, KVAFSU. He is a very illustrated entrepreneur by himself being an academican, made his department self-sustaining and earning 2 crore revenue per year. He narrated various "Atmanirbhar", "Made in India" models of Dairy Engineering for milk processing involving Ghee making, Khova making, Greek Yoghurt etc. Further he also briefed about largescale industrial dairy processing ventures up to 300 crores across India.

The third session was presented by Dr. Dinesh Bhosale, Dairy Expert from Pune and he emphasized the significance of clean milk production in India and briefed the revolutionary success of cooperative system in Indian Dairy sector with the help of Dairy Man of India, Mr. Kurien. Mr. Muralikrishna, Joint Director, presented on Silicon City Piggery FPO with nearly 300 FPO members doing both production and trading of piglets and adult pigs across the country especially Northeastern states.

The next session was on raw material dynamics in livestock feed by Mr. Jason

John, Team Lead, United States Soya Export Council, USSEC India, in his presentation he narrated the global dynamics and Indian Supply and demand dynamics of Soya and Maize in India. He cautioned that growing animal husbandry required equally matching sectoral growth in soya and maize both in productivity and scale.

Mr. Veerakempanna, successful sheep entrepreneur presented his experience in sharing of his illustrious journey for the past 45 years in sheep farming. Mr. Veerakempanna is nicknamed as "Encyclopedia in Sheep Farming" explained in detail how to make sheep farming a sustainable venture with 6 months of complementing revenue from agriculture entrepreneurship together synergizing with sheep farming.

Dr. Lipi Sairiwal, Deputy Commissioner, DAHD, New Delhi presented on Government Sponsored Schemes in Animal Husbandry Production namely AHIDF and NLM followed with success stories in each categories, wherein lots of beneficiaries are benefited by 3 percent interest subvention under AHIDF and up to 25 to 50 lakhs subsidy under NLM. Dr. Tapan Kumar Sahu, Deputy Commissioner, CEAH-AQCS presented on the scenario of export/import of animal products from India. He narrated the present system of quarantine stations at New Delhi, Kolkata, Mumbai, Chennai, Hyderabad and Bengaluru in regulating import and

export of livestock products as per the act of Govt. of India.

NABARD officers were taken for visit of all campuses of CEAH, Campus-1 (Poultry Units), Campus-2 (CFSPFI and CCBF), Campus-3 (AQCS) and Campus – 4(RFS) during the two days of training.

On the concluding day, ie., 28th December, 2023, the first session was by Mr. Anil Kumar, COO and Mr. Madhu, Marketing head of Stellapps (Dairy Digital organization funded by Melinda Gates Foundation). They presented their revolutionary digitization of entire value chain of Dairy around the ecosystem of farmer, Cow, Milk Society, Retailing, Financials, branding, inputs etc. They are developing large scale predictive models by use of AI and ML in Dairy sector for better efficiency and profitability.

Mr. Harish Garware, CMD, Gartech, Pune presented a detailed overview of modernization and digitization of poultry sector not only in feeding and watering but emphasis is given for building structure with the new concepts like radiant energy usage with net zero energy consumption in poultry sheds. Mr. Santosh, entrepreneur from Bengaluru shared his experience of his venture of Honey bee farming and Sheep farming.

The next sessions by Dr. Gopakumar, MD, DLG India who presented on the sunrise sector "The Piggery Enterprise





Field visit 2

Association (former President CWVA) the global body. Dr. H. Raghuraja, Director General, National Academy of RSETIS, Ministry of Rural Development, Govt. of India along with their National Director, Sri. Murugesan and National Controller of RSETIS, Mr. Singh represented in the valedictory. Mr. Jeyachandran, Regional Head, (South India), UNDP also graced the occasion. The VIP dignitaries distributed certificates to NABARD officers. NABARD officers expressed greater satisfaction and appreciated the efforts of CEAH team in making the programme a great success. The VIP dignitaries from CWVA, RSETI and UNDP praised CEAH as an Institution in bringing such a fantastic programme with full package of

in India" with as high as 10 crore to 20 crore business opportunities per venture. This was followed by Mr. Naveen, MD, Nandu's and Mr. Rajesh, MD, SR Daily Nutrition presented on Startup ecosystem in poultry sector for retailing and branding.

The afternoon session began with a brief presentation by Dr. R.M. Kummur, former CGM, NABARD about great success stories of Microfinance in India in general and Microfinance in Animal Husbandry in particular. This was followed by a session on Vaccines and Diagnostics by Dr. Azad Meer from Hyderabad and Dr. Samuel, MD, Bhadra Agencies presented on Business opportunities in Animal Husbandry Medicines, Vaccines and Diagnostics. The last session on



Certificates Distribution

Animal Husbandry database was presented by Dr. H. Teggi, Joint commissioner, CEAH.

The valedictory function concluded at 5.30 pm on 28th December, 2023. Dr. Abdul Rahman, Executive Director of Common Wealth Veterinary

modules around financing of Animal Husbandry business models. The event concluded with vote thanks by Dr. Esakkimuthu, DGM, NBSC, Lucknow and promised to engage long term with CEAH with various programmes in the future.







# Ecolex Animal Nutrition Making a Grand Entry into India

Ecolex Animal Nutrition, a prominent figure in the animal nutrition industry since its inception in 2005, has recently unveiled an ambitious vision for a new era in sustainable animal nutrition. Operating from its Singapore headquarters and utilizing cutting-edge manufacturing facilities in Malaysia, Ecolex has demonstrated remarkable growth, extending its influence to over 45 countries across six continents. In an exciting development, the company is set to continue its global expansion, with a strategy to enter the Indian subcontinent early in 2024.

Dedicated to providing high-quality, nutritionally advanced products and solutions to the livestock industry, Ecolex's international presence reflects the trust and confidence customers worldwide have placed in its portfolio. The company not only aims to be recognized for its products but also for its commitment to innovation, sustainability, and the betterment of the livestock industry.

Ecolex envisions a future where animal nutrition goes beyond sustenance, contributing to profitability, sustainability, and the well-being of the livestock industry. To realize this vision, the company has realigned its product portfolio into four distinct Pillars of Competence, each addressing specific needs:

## 1. Functional Lipids - A Game-Changer in Animal Nutrition:

- Encompassing rumen bypass fats and innovative spray-cooled granulated vegetable oils, this pillar enhances the health and

productivity of livestock.

- Rumen bypass fats benefit dairy cattle by improving energy utilization and increasing milk production, while spray-cooled granulated vegetable oils provide essential fatty acids for monogastric applications.

## 2. Performance Solutions - Enhancing Nutritional Bioavailability:

- This pillar comprises blends of molecules supporting improved nutritional bioavailability and digestion through emulsification and viscosity modulation.
- Livestock farmers benefit from improved feed efficiency, reduced waste, and healthier animals, contributing to a more sustainable and efficient industry.

## 3. Health and Environment Solutions - Nurturing Well-being and Sustainability:

- Focusing on molecules with broad-spectrum antimicrobial capabilities, this pillar addresses health challenges in animals.
- Ecolex is also committed to molecules with environmental benefits, actively reducing methane emissions in ruminant livestock and pioneering a more sustainable approach to animal nutrition.

## 4. Alternative Ingredients - Paving the Way for Sustainable Feeding:

- This pillar offers innovative and eco-friendly ingredient options, including insect meals, oils, bioactive components, and

sustainable vegetable protein sources.

- By reducing the carbon footprint in livestock production, Ecolex takes significant steps toward a more sustainable future for animal nutrition.

Ecolex is committed to supporting customers beyond product provision, offering knowledge, resources, and expertise to thrive in a changing world. Environmental responsibility is a top priority, as the company aims to lead the way in sustainable animal nutrition by addressing issues such as methane emissions and promoting efficient feed utilization.

The journey of Ecolex Animal Nutrition has been made possible through the support and trust of customers, partners, and stakeholders worldwide. As the company looks to the future, it invites others to join in its transformative journey towards innovation, sustainability, and the well-being of livestock. By realigning into the four Pillars of Competence, Ecolex seeks to revolutionize animal nutrition, creating a brighter, more sustainable future for the industry and the planet.

To learn more and be part of this exciting adventure, visit [www.ecolexanimalnutrition.com](http://www.ecolexanimalnutrition.com) or scan the QR code below. Together, Ecolex Animal Nutrition and its partners aim to shape a more prosperous and environmentally responsible future for the livestock industry, extending their reach into the promising landscape of the Indian subcontinent very soon.

## Zenex Expands Global Reach with Ayurved Purchase, Eyes EU Market Growth

Zenex announced that it would buy Ayurved, a company founded by Pradip Burman that sells ayurvedic and herbal medicines, feed supplements, and topical treatments for farm and companion animals, for an undisclosed amount.

According to Zenex, the acquisition expands the company's animal health portfolio, allowing it to better meet local and international customer needs. Ayurved contributes research and new product capabilities, a strong brand portfolio, complementary geographic access, and management and sales teams to the organisation.

Zenex, headquartered in Ahmedabad, is backed by a group of financial investors led by Multiples PE, which includes CPP Investments, RARE Enterprises, SBI, ADB, IFC, and HNIs. In July 2021, Zydu Cadila signed a Business Transfer Agreement with Zenex Animal Health India to sell its animal healthcare business.

Ayurved was founded as a subsidiary of Dabur India Limited in 1992 and later spun off as an independent company in 2002.

Arun Atrey, Zenex's Managing Director and CEO, stated that the acquisition would help the company grow because it operates in a complementary space to its current business. Ayurved's presence in the EU (Poland) would also assist Zenex Animal Health's export division in expanding its

footprint in the EU region.

Renuka Ramnath, Chairperson of Zenex and Founder, MD, and CEO of Multiples Alternate Asset Management, stated that as part of Zenex's long-term value creation journey, the company will continue to look for interesting opportunities to bring companies with complementary capabilities into our fold and scale them using Zenex's established sales and distribution network. Pradip Burman, Founder of Ayurved, expressed confidence that the legacy established over the previous 31 years would be carried forward.

## Merging Strengths: Nourish You Acquires One Good in Mega Alt-Dairy Deal

Indian superfood maker Nourish You has acquired plant-based dairy startup One Good in one of the largest acquisitions in India's alt-dairy sector. The acquisition strengthens Nourish You's position in the market and leverages One Good's strong online presence to complement its retail footprint. The deal was conducted via a share swap, and while the brands will remain separate, operations will merge and restructuring will take place.

India has a booming plant-based market, with nearly two-thirds of vegan companies focused on dairy alternatives. Nourish You, founded in 2015, offers a range of superfood grains and products and ventured into the alt-dairy world earlier this year. One Good, founded in 2016, has seen success with its cashew-oat-millet milk and expanded into vegan alternatives to ghee, butter,

mayo, and peanut curd. The company has also acquired other plant-based businesses to broaden its portfolio.

The acquisition aims to consolidate the foothold of both companies in India's non-dairy sector. There were no redundancies as a result of the acquisition, and the teams complement each other well. One Good's senior management employees have assumed titled roles in the new entity.

Cost remains a key hurdle for many Indians in adopting plant-based alternatives, as they can be more expensive than cow's milk. However, One Good has made strides in offering more affordable options, with its cashew-oat-millet milk priced at half the cost of competitors. Nourish You's growing retail presence and One Good's strong direct-to-consumer engagement position them as the go-to destination for innovative plant-based alternatives in India.

Nourish You aims to close the fiscal year with a revenue of ₹30 crores (\$3.6M) and aims to reach ₹100 crores (\$12M) by 2025. The Indian alt-dairy market is valued 2.5 times higher than plant-based meat, and the government has shown support for the industry. Nourish You plans to secure ₹60 crores (\$7.2M) in its upcoming Series A round, which is expected to close by mid-2024.

In the coming year, One Good plans to expand its presence in more stores, widen the reach of its cost-competitive fresh milk, and target institutional consumers in addition to household consumers.

Overall, the acquisition of One Good by Nourish You strengthens both companies' positions in the Indian plant-based sector and sets them up for further growth and expansion in the coming years.

## **Milma's ERCMPU Introduces Comprehensive Insurance and Welfare Schemes**

Milma's Ernakulam Regional Cooperative Milk Producers' Union (ERCMPU), a dairy pioneer, plans to implement comprehensive cattle insurance and animal welfare schemes for its 1,000-plus farmers in Idukki, Kottayam, Thrissur, and Ernakulam districts. According to ERCMPU Chairman M T Jayan, the package will cost Rs 5 crore in total and will include insurance premium subsidies, veterinary doctor services, mineral mix distribution, and telemedicine via WhatsApp.

The scheme ensures that doctors can visit dairy farmers' homes to provide medicine for ailing cows. The farmer must pay Rs 300 as a consultation fee for his first insured cow, and Rs 100 for each subsequent cattle head. The ERCMPU will provide a subsidy of Rs 500 per cow for up to four. There will also be insurance coverage for cattle that die or become permanently disabled. Furthermore, each insured cow will be eligible for mineral mixtures worth approximately Rs 500. This will be given freely thanks to financial assistance from the National Dairy Development Board. Milma's doctors will conduct medical camps in ERCMPU cooperative societies. Such initiatives will prescribe solutions to infertility, a major problem among cattle. Farmers will receive Rs 15,000 as ex gratia if their cows die. However, this only partially compensates for the farmers' losses. As a result, they have introduced a new comprehensive insurance scheme.

Telemedicine allows farmers to prescribe medicines for cows with less serious diseases via WhatsApp. This occurs after the farmer informs the cooperative society secretary, who forwards the message to the doctor. This arrangement is already in place, as the scheme was implemented on National Milk Day.

## **Dairy Diplomacy: Amit Shah Addresses Amul-Aavin Competition, Advocates Cooperative Growth**

Amul's competition with Aavin: Shah clarifies the dairy scene in India. There are no restrictions on anyone setting up a dairy network anywhere in the country.

Speaking on Amul's competition with Tamil Nadu's Aavin, Union Minister Amit Shah stated that both the Tamil Nadu Cooperative Milk Federation (Aavin) and the Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF) (Amul) are registered under their respective State Cooperative Acts.

According to Shah's reply, "As informed by the Department of Animal Husbandry & Dairying, in the year 2002, the Central Government notified amendments to the Milk and Milk product Order (MMPO) 1992 making it more liberal to facilitate dairy development in the country," he said.

The aforementioned Amendment removed the provision for assigning milksheds. As a result, there are no restrictions on anyone establishing a dairy network throughout the country.

Member P. Wilson inquired about the steps taken by the ministry in response to Amul's competition with Aavin of TN, the Co-operative Milk Producers Federation, and whether the spirit of Operation White Flood 1970, which transformed India from a milk-deficient nation to the world's largest producer, is to allow other co-operatives to thrive without infringing on each other's milk shed area, and if so, the specific steps taken by the government.

Shah provided a broader picture of the dairy scene, stating that the dairy cooperative sector has 22 Milk Federations/Apex Bodies, 240 districts, cooperative milk unions, 28 marketing dairies, 24 Milk Producer Organisations covering approximately 2.3 lakh villages, and 1.8 crore dairy farmers as members.

The Department of Animal Husbandry & Dairying, Government of India, is implementing dairy development schemes such as the National Programme for Dairy Development, the Dairy Processing and Infrastructure Development Fund, and the Supporting Dairy Cooperatives and Farmer Producer Organisations engaged in dairy activities, he added.

## **Chief Minister Nitish Kumar Inaugurates Bihar Dairy and Cattle Expo 2023**

The Bihar Dairy and Cattle Expo 2023, which featured improved milch cattle and bull breeds, was inaugurated by Chief Minister Nitish Kumar. The expo featured Golu-2, a Panipat buffalo priced at Rs 10 crore. Additionally, Nitish inaugurated five dairy plants and COMFED equipment worth Rs 411



crore. He also launched new Sudha products and distributed dividend checks to the state government and milk cooperative unions. The CM laid the groundwork for the construction of new buildings and facilities, including a new office block for COMFED and a Matsya Vikas Bhawan in Patna.

ATNA: The three-day Bihar Dairy and Cattle Expo 2023 was inaugurated on Thursday by the chief minister. The state's first dairy and cattle expo, held at the Animal Sciences University (BASU) playground, featured improved milch cattle and bulls from various states. Golu-2, a Murrah buffalo from Panipat, Haryana, which was valued at Rs 10 crore at the Panipat animal fair, has become the Expo's star attraction.

At the same event, the Chief Minister also inaugurated five COMFED dairy plants worth Rs 239 crore and other COMFED equipment worth Rs 172 crore via remote. He also inaugurated a Veterinary and Animal Husbandry College in Kishanganj via remote.

Nitish introduced five new COMFED Sudha brand products: sweets, namkeen, cookies, bread, and drinking water. He also issued cheques to the state government and milk cooperative unions for the distribution of Rs 10.50 crore dividend. The state government will receive a dividend of Rs 5.76 crore from the total amount, with the remaining Rs 4.74 crore distributed to milk cooperative unions. The CM also laid the groundwork for the construction of a new COMFED office building costing Rs 14.31 crore and a new Matsya Vikas Bhawan costing Rs 54.35 crore at the Fisheries Research and Training Centre in Mithapur, Patna. Nitish also laid the groundwork for Sudha's Cafeteria, which will be built on the COMFED's office

premises for Rs 3.57 crore. He launched Bihar Animal Science University's Animal Nutrition App. The CM also examined the proposed design for the Bihar Animal Sciences University. He walked around the expo, asking questions about various animals.

## **Dairy Darbar: JKMPCL Sets the Stage for Sustainable Dairy Practices in Jammu and Kashmir**

JKMPCL offers rural farmers the best rates among all state cooperatives: The "Dairy Darbar" programme, organised by Jammu and Kashmir Milk Producers' Cooperative Limited in Dolian Jatta village, Hiranagar sector, district Kathua, was inaugurated by the MD of Dairy Development, N S Bali.

The event, a unique initiative of the J&K government, was attended by approximately 400 milk producers from the region's JKMPCL. The programme was designed to encourage and promote dairy as a profitable vocation among the area's milk producers.

Bali stated that the major challenge faced by milk producers is a lack of a suitable market for their produce at remunerative prices, which is being addressed by JKMPCL. He assured the farmers that the J&K government is actively monitoring and promoting dairy development in the UT.

He stated that JKMPCL provides the best rates among all state cooperatives, making dairy farming financially rewarding for youth and rural farmers. The J&K government has prioritised the progress of milk producers through the

implementation of various schemes and policies. Jammu and Kashmir Milk Producers' Cooperative Limited is always at the forefront of developing the technology required to produce high-quality processed milk and milk products, he stated.

On the occasion, MD distributed cheques for the Price Difference for 2022-23 to all farmers who attended the programme. He also promised to set up dairy plants in both divisions of J&K. Furthermore, he discussed JKMPCL's progress over the years, highlighting recent veterinary extension services. He discussed the progress of land allotment to JKMPCL in Jammu and Kashmir for the establishment of new dairy plants. A pledge was also made to strengthen the cooperative model in the UT and prevent the entry of private organisations with malicious intent. Sahib Singh, CEO of JKMPCL and Board Member of JKMPCL, attended the event, as did JKMPCL employees.

## **Goa's Swayampurna Dream: Milk Production Inches Up, Yet Faces Hurdles**

A long way before Goa becomes 'swayampurna'. Goa's milk production has increased slightly, reflecting the state's slow progress towards becoming 'swayampurna' or self-sufficient in milk availability. From 63,000 tonnes in 2021-22, it increased to 64,000 tonnes in 2022-23.

The ministry of fisheries, animal husbandry, and dairying revealed in parliament that the pace of milk

production in the state has slowed in the last three years, despite initial indications that it would be on the rise.

In 2022-23, the state saw a 1.5% increase in milk production, which was significantly lower than the 5% growth rate achieved the previous year.

According to the ministry, the country's annual milk production growth rate fell to 3.8% in 2022-23 from 5.8% in 2021-22 due to the lumpy skin disease that affects dairy cattle. However, in Goa, aside from the lumpy disease outbreak, which affected approximately 32 dairy cattle in February, dairy farmers face a number of challenges.

Small farm sizes, a lack of fodder, a lack of dairy equipment, difficulty acquiring quality cattle, and a lack of milk storage infrastructure are all obstacles to increasing milk productivity. The state currently has around seven schemes to promote dairy farming, including the Kamdhenu scheme for cow purchase.

Other schemes include milk producer incentives through dairy cooperatives, the Pashupalan scheme for newborn calves, financial incentives for fodder cultivation, a dairy equipment scheme, financial assistance to dairy farmers in tribal areas, and incentives for community dairy farms.

Ironically, the slow progress in milk production occurs despite the fact that dairy farming is a profitable business in the state thanks to government subsidies.

## **Aavin Expands Access to Loans for Dairy Farmers**

Dairy Development Minister Mano Thangaraj announced on Thursday

that Aavin has partnered with yet another bank to provide loans to dairy farmers.

"We're seeing more banks enthusiastically providing loans in the animal husbandry category. "Loans are mostly for new milch animals or animal maintenance," he explained while distributing loans to ten farmers at Aavin headquarters.

The loans are repaid by the respective primary cooperative society to which the farmers belong using the payment owed to them. "We have received more than 1.65 lakh loan applications from farmers thus far. These will be processed. Farmers can borrow up to ₹1.60 lakh without providing collateral, according to the speaker.

Private banks have recently begun to enthusiastically provide loans to dairy farmers. On Thursday, the loans were made on behalf of Federal Bank. Nationalised banks, such as Indian Bank, Canara Bank, and Bank of Baroda, have provided significant assistance to farmers. Farmers received approximately ₹150 crore in loans over the past year. If the loan is repaid in full, the interest is nearly zero.

## **Karnataka Bank Teams Up with Digivridhi to Empower Dairy Farmers with Digital Financial Services**

Private sector lenders Karnataka Bank has partnered with fintech company Digivridhi (DGV) to provide a wide range of financial services to dairy farmers and milk

societies. The services will be made available through Village Dairy Co-operative Societies that are affiliated with Karnataka Milk Federation (KMF) Milk Unions. To begin, the services are now available to milk societies affiliated with the Chamarajnagar Milk Union, and will be expanded to farmers from other unions in quick succession.

Speaking about the development, Shri Srikrishnan H, MD & CEO of Karnataka Bank, stated, "We are accelerating our Fintech initiatives and collaborating with partners across various verticals to improve access to markets and customer experience. This partnership with DGV will provide dairy farmers with seamless and innovative end-to-end digital product offerings, as well as access to institutional credit, while also easing and digitising payments across the dairy value chain."

Shri Sekhar Rao, Executive Director of Karnataka Bank, expressed his delight at the new collaboration, saying, "Karnataka Bank has a rich legacy of being a key player in the Agri sector with strong underwriting capabilities for loan disbursements, duly complemented by the presence of specialised Agriculture Field Officers at potential areas. We will further consolidate this portfolio with this collaboration with fintech partner DGV by launching specific products/solutions that leverage both companies' unique strengths in the dairy sector.

## **Awareness Camps in Ramban Focus on Boosting Dairy Sector**

Dr. Shubhra Sharma, Director of the

Animal Husbandry Department in Jammu, presided over a series of awareness camps during her two-day visit to Ramban district.

Speaking at various camps, Dr. Shubhra urged farmers to take advantage of the Integrated Dairy Development Scheme (IDDS) and establish dairy units to increase milk production. She stated that JKMPCL will provide facilities, particularly for milk collection, purchasing subsidised milk vans, and opening Milk ATMs in Ramban. She encouraged the participants to focus on increasing the district's milk output and strengthening the poultry sector by taking advantage of farmer-friendly schemes such as IDDS, IPDP, Feed and Fodder, and HADP.



Responding to local demands, the Director stated that the demand for the establishment of new Veterinary Centres and the availability of medicines would be considered.

At the outset, CAHO Dr. Suhail informed Dr. Shubhra of the department's achievements and progress in various sectors and schemes.

During the Awareness Camps organised at Chief Animal Husbandry Officer (CAHO), office Kowbagh, village Gaam, and Chamalwas, where a team led by CAHO, Dr. Suhail Jan Kawoosa comprising Dr. Nadeem Ahmed, Extension Officer, Extension & Publicity Wing, Directorate of Animal Husbandry, Jammu and Managing Director, JK Milk

Producers' Cooperative Ltd. (JKMPCL) Chirag Bhensdadia sensitised and motivated farmers about various government sponsored schemes and the subsidised fa

The Managing Director of JKMPCL stated that the company collects up to 1,50,000 litres of milk from 60,000 people every day and distributes between Rs.8 crore and Rs.9 crore to them across the state of Jammu and Kashmir. Last year, Rs.280 crore was paid to these milk producers, he said, and JKMPCL purchased buffalo milk at a rate of one percent milk fat for Rs.8.6, which is the maximum rate in J&K at Rs.68 per litre of buffalo milk, the highest price in India.

At Kowbagh, up to 25 Pashu

Sakhies were given free kits to record milk production and a balanced diet of cattle and bovines in their respective villages, for which they had previously been trained.

Many progressive farmers also spoke about their experiences as beneficiaries of government-sponsored schemes, as well as local issues and demands. Some of them demanded a Milk Van and the installation of a Milk ATM in their respective areas.

The villagers of Gaam demanded that more Awareness Camps be held in remote hamlets, as well as the establishment of a Veterinary Centre in the village. The villagers were given free feed supplements and deworming medicines.

## Purabi Dairy's Sustainable Expansion Plans for 2024 Revealed

Purabi Dairy has set its sights on a transformative year for the dairy industry in 2024. The renowned dairy giant unveiled ambitious plans that promise to reshape the industry landscape and elevate Purabi Dairy's position as a market leader.

Purabi Dairy, which is known for its commitment to quality and innovation, plans to implement cutting-edge technologies to improve milk production efficiency. The company intends to invest heavily in cutting-edge milking equipment and automated processes to streamline operations. These advancements are expected to increase productivity while also ensuring the delivery of high-quality dairy products to consumers.

Furthermore, Purabi Dairy has developed a comprehensive expansion strategy that includes expanding its network of dairy farms in strategic locations. The company plans to meet the growing demand for high-quality dairy products by establishing new farms with modern facilities. This expansion is expected to increase employment and contribute to the overall growth of the agricultural sector.

Purabi Dairy has pledged to implement eco-friendly initiatives throughout its operations in order to transition to more sustainable practices. The company intends to invest in renewable energy sources and environmentally friendly packaging, aligning its efforts with global sustainability objectives. This environmentally conscious



approach is expected to appeal to consumers, who are increasingly prioritising products that have a low environmental impact.

Purabi Dairy's ambitious plans include forming alliances with local farmers to create a more inclusive and supportive dairy ecosystem. By collaborating with farmers, the company hopes to provide them with training programmes and access to advanced technologies. Furthermore, this collaborative effort is expected to benefit the entire dairy community, ensuring mutual growth and success.

Purabi Dairy plans to introduce new and exciting dairy products as part of its commitment to innovation in order to meet changing consumer preferences. Furthermore, the company aims to stay ahead of market trends and provide consumers with a diverse range of options, including unique flavoured milk variants and health-focused offerings.

Purabi Dairy's ambitious plans for 2024 represent an important milestone in the dairy industry. With a focus on technology, sustainability, expansion, and innovation, the company is well-positioned to shape the dairy industry's future, promising a year of remarkable advancements and positive transformation.

## **Union Home and Cooperation Minister Shri Amit Shah laid the foundation stone for NCDFI headquarters in Anand virtually**

Union Home and Cooperation



Minister Shri Amit Shah laid the foundation stone for the National Cooperative Dairy Federation of India (NCDFI) headquarters in Anand, India. Chief Minister Shri Bhupendra Patel attended the event, where the NCDFI e-Market Awards were presented to stakeholders of dairy cooperative societies engaged in trading and providing services through the e-market platform for various dairy products and agricultural produce.

Shri Amit Shah highlighted India's achievements in the global dairy and milk production sector, emphasizing the importance of dairy unions operating at various levels to ensure fair prices for milk in villages and prevent exploitation of milk producers. District milk producer unions also focus on enhancing animal breeds, promoting animal health, and ensuring proper treatment of animals. Cooperative dairies play a crucial role in the POSHAN Abhiyaan by supplying nutritious milk to malnourished children.

Gujarat has become a role model in the nationwide dairy sector, with cooperative dairies in various states established through the efforts of the National Dairy Development Board (NDDDB). India has emerged as the world's leading producer of milk, holding a substantial 24% share, and the country has witnessed a remarkable 51% increase in milk production over the past 8 years. Gujarat has played a crucial role in this achievement, with Amul and the National Dairy

Development Board also coming into existence.

NCDFI has been guiding these cooperative dairies for years and is set to construct its new office in Vaghasi village near Anand, which will be solar-powered. Under Prime Minister Shri Narendra Modi's leadership, India has undergone a significant digital transformation, with the government encouraging NCDFI to adopt online payment methods in animal husbandry, milk production, and dairy.

The foundation stone-laying ceremony for the new National Cooperative Dairy Federation (NCDFI) office building in Gujarat marked a significant step towards "Sahkar se Samridhhi" under Prime Minister Shri Narendra Modi's leadership and the guidance of the country's first Cooperation Minister, Shri Amit Shah. Under Modi's visionary leadership, a separate Ministry of Cooperation was initiated in the country for the first time after decades of independence. Under Amit Shah's leadership, significant progress has been made in the cooperative sector, with agriculture and animal husbandry playing a pivotal role in the nation's economy.

The Chief Minister emphasized the need to focus on the broader development of natural farming, cow-based farming, and animal husbandry-dairy production. He expressed confidence that the new NCDFI building will evolve into a future hub for empowering farmers

in animal husbandry and providing training in new technologies and methods. Gujarat's dairy industry, characterized by "production by mass instead of mass production," received an estimated Rs 150 crore daily through DBT e-transfer in alignment with Prime Minister Modi's Digital Bharat initiative.

The Chief Minister commended NCDFI's efforts in digitalizing the dairy sector, facilitating bulk purchases, and streamlining resource utilization at effective prices through the e-market. He urged everyone to contribute to the realization of the Prime Minister's vision of Viksit Bharat@2047 through the Amrit Kranti in milk production-sales, emphasizing the strengthening of the goal of "Sauno Saath, Sauno Vikas" and fostering the spirit of cooperation.

## **Mahanand Dairy's Board Approves NDDB Takeover Amidst Producer Worries**

The board of directors of Mahanand Dairy, a once-profitable venture under the Maharashtra government, has approved a resolution to transfer control to the National Dairy Development Board (NDDB). However, milk producers in the state are concerned and claim that the government and board have decided to facilitate Amul's expansion in Maharashtra.

Previously, the State government hinted that it was considering handing over Mahanand to the Union Government via the NDDB, admitting that dairy was facing an existential crisis as the co-operative milk sector was under pressure from aggressive marketing by

private players. "The private sector's share of the state milk business has increased dramatically. The private sector is using a variety of modern marketing techniques to boost sales and expansion. "This has an impact on the cooperative sector and their sales," the state government admitted.

"The most affected is the Mahanand, the apex body (in the milk sector), and the institution is not even able to cover daily expenses," said Maharashtra Animal Husbandry and Dairy Development Minister Radhakrishna Vikhe Patil, in response to a written question in the State Assembly last year. The government admitted that Mahanand is in a financial crisis for "various reasons". The minister claimed that other cooperative milk dairies in the state are not experiencing a financial crisis like Mahanand.

Milk farmers and associations in the State claim that the government's decision to hand over control of Mahanand Dairy to the National Dairy Development Board (NDDB) is motivated by a desire to facilitate Amul's entry into the State at the expense of Mahanand.

## **Mango Lassi Crowned World's Best Dairy Beverage in TasteAtlas' 2023-24 Awards**

Mango lassi ranks first on TasteAtlas' list of the Top 16 Dairy Beverages in the World for 2023-24, which also includes standard Punjabi lassi, sweet lassi, salted lassi, bhang lassi, and mint lassi.

Toast to a glass of mango lassi! This popular dairy beverage from North

India, which is widely consumed throughout the country during the summer, has been named the best dairy beverage in the world by the popular food and travel guide TasteAtlas in the 2023-24 awards. Mango Lassi is a refreshing combination of yoghurt (dahi) and fresh mango. It typically contains cardamom, water, and sugar. For an extra touch, add soaked saffron strands to the recipe to make Kesar Mango Lassi. Mix and blend the ingredients until the beverage is creamy and frothy. Mango Lassi is best enjoyed chilled to fully appreciate its flavour.

The internet couldn't stop raving about the delectable mango lassi. In the comments section of TasteAtlas' award announcement post, one social media user praised it as "Lassi supremacy," while another stated that Mango Lassi is "the best of the best." As the taste of this lassi varies depending on the mango variety used, a social media user stated that the "best one is made of Alphonso."

The feedback in the comments section demonstrates how popular Mango Lassi is worldwide. A Mango Lassi fan wrote, "I'm not even Indian, but I have Indian friends, and I always ask for this." A Brazilian teacher shared her delightful experience preparing various lassi flavours. "I was teaching my students about India



(we are Brazilians), and there was this recipe. We decided to make it, and we used the lassi in other recipes. "Banana lassi, strawberry lassi... delicious!"

Lassi is a traditional Indian smoothie from the pre-refrigeration era, when Punjabi farmers would combine milk, sugar, and curd and store the mixture in clay pots. It is a delicious beverage that is ideal for beating the summer heat, refreshing the palate, and hydrating the body.

Lassi comes in a range of sweet and salty flavours. Mango lassi is ranked first in TasteAtlas' list of the Top 16 Dairy Beverages in the World for 2023-24, with the standard Punjabi lassi ranking fourth. Other variations of mango lassi include meetha (sweet lassi), salted lassi, bhang lassi, and mint lassi. Sweet lassi is also ranked as the fifth best dairy beverage in the world. Having three titles in the top dairy beverages in the world demonstrates how amazing and popular Punjab's lassi is not only in India, but all over the world.

## **Shifting the Paradigm: UNEP Urges Policymakers to Embrace Novel Dairy and Meat Alternatives**

A new assessment by the UN Environment Programme (UNEP) highlights the potential of novel alternatives to meat and dairy products in reducing the environmental impact of the global food system. The assessment focuses on three types of alternatives: novel plant-based meats, cultivated meat from animal cells, and protein-rich products derived through rapid fermentation

by microorganisms. These alternatives have the potential to significantly reduce greenhouse gas emissions, land degradation, deforestation, water and soil pollution, and loss of biodiversity. They could also help address animal welfare concerns and reduce the risks of zoonotic diseases and antimicrobial resistance.

The report emphasizes that these novel alternatives can contribute to a more sustainable, healthier, and more humane food system, with regional differences. It suggests that policies should be implemented to safeguard food security, jobs, livelihoods, social and gender equity, and culture while maximizing the benefits of these alternatives and avoiding potential negative health and social impacts. The report also calls for more government support and open and transparent research to unlock the potential of these new technologies.

While conventional animal products are an important source of protein, their production and consumption in high- and middle-income countries have negative impacts on both people and the planet. The animal agriculture industry is a major driver of climate change, accounting for almost 60% of food-related greenhouse gas emissions and 14-20% of global emissions. It is also associated with public health challenges such as cardiovascular diseases, certain cancers, obesity, diabetes, antimicrobial resistance, and the spread of zoonotic diseases.

Novel alternatives to animal products can help reduce harm to farm animals and improve public health. However, some plant-based products may be highly processed and contain high amounts of salt and saturated fats. The health

impacts of using cultured meat from animal cells or fermentation are still not well understood.

The report suggests that novel alternatives can help consumers shift away from unsustainably high levels of animal protein consumption by closely mimicking the sensory experiences of meat and other animal products. However, factors such as cost, taste, and social and cultural acceptability will influence the adoption of these alternatives.

The report also emphasizes the need for a just transition to a more sustainable food system, with equitable and regionally appropriate approaches. It recommends policy options such as greater support for open access research and commercialization, shifting subsidies and tax rebates to favor novel alternatives, and internationally agreed mechanisms on trade policies and food safety standards.

The authors highlight the importance of open and transparent research to understand the nutritional implications of consuming these alternatives regularly and the socio-economic implications of their uptake in different regions. The report does not consider alternatives such as regenerative livestock farms, feed additives, farming insects, reduced meat consumption, or taxing meat, as these are already being pursued but have faced challenges in gaining government support and achieving impact at scale.

Overall, the assessment underscores the potential of novel alternatives to meat and dairy products in reducing the environmental footprint of the food system and calls for supportive policies and further research to maximize their benefits.



# Editorial Calendar 2023

Publishing Month: <b>January</b> Article Deadline : <b>28<sup>th</sup>, Dec. 2023</b> Advertising Deadline : <b>30<sup>th</sup>, Dec. 2023</b> Focus : <b>Opportunities and Challenges</b>	Publishing Month: <b>February</b> Article Deadline : <b>28<sup>th</sup>, Jan. 2024</b> Advertising Deadline : <b>30<sup>th</sup>, Jan. 2024</b> Focus : <b>Budget</b>	Publishing Month: <b>March</b> Article Deadline : <b>26<sup>th</sup>, Feb. 2024</b> Advertising Deadline : <b>28<sup>th</sup>, Feb. 2024</b> Focus : <b>Summer Stress Management</b>	Publishing Month: <b>April</b> Article Deadline : <b>28<sup>th</sup>, March 2024</b> Advertising Deadline : <b>30<sup>th</sup>, March 2024</b> Focus : <b>Cold Chain</b>
Publishing Month: <b>May</b> Article Deadline : <b>28<sup>th</sup>, April 2024</b> Advertising Deadline : <b>30<sup>th</sup>, April 2024</b> Focus : <b>Nutrition</b>	Publishing Month: <b>June</b> Article Deadline : <b>28<sup>th</sup>, May 2024</b> Advertising Deadline : <b>30<sup>th</sup>, May 2024</b> Focus : <b>Milk - Production &amp; Preservation</b>	Publishing Month: <b>July</b> Article Deadline : <b>28<sup>th</sup>, June 2024</b> Advertising Deadline : <b>30<sup>th</sup>, June 2024</b> Focus : <b>Monsoon Management</b>	Publishing Month: <b>August</b> Article Deadline : <b>28<sup>th</sup>, July 2024</b> Advertising Deadline : <b>30<sup>th</sup>, July 2024</b> Focus : <b>Sustainability</b>
Publishing Month: <b>September</b> Article Deadline : <b>28<sup>th</sup>, August 2024</b> Advertising Deadline : <b>30<sup>th</sup>, August 2024</b> Focus : <b>Processing &amp; Packaging</b>	Publishing Month: <b>October</b> Article Deadline : <b>28<sup>th</sup>, September 2024</b> Advertising Deadline : <b>30<sup>th</sup>, September 2024</b> Focus : <b>Disease Prevention</b>	Publishing Month: <b>November</b> Article Deadline : <b>28<sup>th</sup>, October 2024</b> Advertising Deadline : <b>30<sup>th</sup>, October 2024</b> Focus : <b>Biosecurity</b>	Publishing Month: <b>December</b> Article Deadline : <b>28<sup>th</sup>, November 2024</b> Advertising Deadline : <b>30<sup>th</sup>, November 2024</b> Focus : <b>Winter Stress</b>

## Subscription Rates

### Time Period

<b>1 Year</b>	<b>INR 2400</b>	<b>USD 250</b>
<b>3 Year</b>	<b>INR 6500</b>	<b>USD 650</b>
<b>5 Year</b>	<b>INR 10000</b>	<b>USD 1000</b>

\*18% GST Extra

Contact Name : \_\_\_\_\_

Company Name : \_\_\_\_\_

Postal Address : \_\_\_\_\_

City : \_\_\_\_\_ State : \_\_\_\_\_ Mob. No. \_\_\_\_\_

Postal Code : \_\_\_\_\_ Country : \_\_\_\_\_

For more detail, contact:



**Pixie Expomedia Pvt. Ltd.**  
 C/o OmAng Hotel, Namaste Chowk, Near Janta Petrol Pump, KARNAL - 132001 (Haryana) INDIA

### We wish to subscribe the following

#### Poultry Planner

1 Year  3 Year  5 Year  
 from \_\_\_\_\_ to \_\_\_\_\_

#### Dairy Planner

1 Year  3 Year  5 Year  
 from \_\_\_\_\_ to \_\_\_\_\_

#### Poultry Times of India

1 Year  3 Year  5 Year  
 from \_\_\_\_\_ to \_\_\_\_\_

Grand Total: \_\_\_\_\_

### Payment Details:

Send DD or Cheque in favour of Pixie Expomedia Pvt. Ltd. payable at Karnal  
 Address: C/o OmAng Hotel, Namaste Chowk, Near Janta Petrol Pump, KARNAL - 132001 (Haryana) INDIA or Transfer money to Canara Bank  
 Bank address: Sector 12; U Estate Karnal  
 Account Type: Current  
 Account Name: Pixie Expomedia Pvt. Ltd.  
 Account Number: 120000991579  
 IFSC Code: CNRB0003264 | Swift Code: CNRBINBBFD | PAN No. AAMCP6787A

Date: \_\_\_\_\_ Company's Stamp & Signature

By signing this form I acknowledge that I have read and agree to the quoted cost above

\*5% GST Extra **Advertisement Tariffs**

Advertisement Type	Single Issue (cost @)	Advertisement Type	Single Issue (cost @)
Front Page	30000 <input type="checkbox"/>	Back Title	20000 <input type="checkbox"/>
Front Gate Fold	25000 <input type="checkbox"/>	Back Gate Fold	19000 <input type="checkbox"/>
Front Title Inside	20000 <input type="checkbox"/>	Back Title Inside	18000 <input type="checkbox"/>
Front Title Opening	16000 <input type="checkbox"/>	Back Title Opening	16000 <input type="checkbox"/>
Full Page	8000 <input type="checkbox"/>	Center Spread	18000 <input type="checkbox"/>

IRIS  
**MONEY**  
doesn't talk, it swears

# Happy cow Plus milk



## 4 Benefits

1. Money Plus Improves milk yield
2. Improves the fat percentage
3. Improves reproductive performance
4. Helps in better growth

## 2 Goals

1. More Milk
2. More Profit !!!



FOR FURTHER INFORMATION  
please contact +91 80 48663242 or [admin@irides.in](mailto:admin@irides.in)  
or visit our website [www.irides.in](http://www.irides.in)

# INTERNATIONAL EXHIBITION ON DAIRY SECTOR



2<sup>nd</sup> Edition  
**THE Dairy EXPO**

**08-10 Aug. 2024**

**India Expo Center & Mart,  
Greater Noida, Delhi - NCR,  
India**

## Event Highlights



**100+**  
Exhibitors / Sponsors



**10+**  
Countries



**100+**  
VIP Attendees



Extensive Media Coverage



**5000+**  
Visitors

Event by



Concurrent Events



Media Partner

**POULTRY  
PLANNER**

**DAIRY  
PLANNER**

+91-999-170-8200 | 999-170-5005 | info@thedairyexpo.in | www.thedairyexpo.in