

DAIRY PLANNER

HARBIL/2004/22481

Title Code HARBIL00698

Vol. 21 | No. 10 | October - 2024

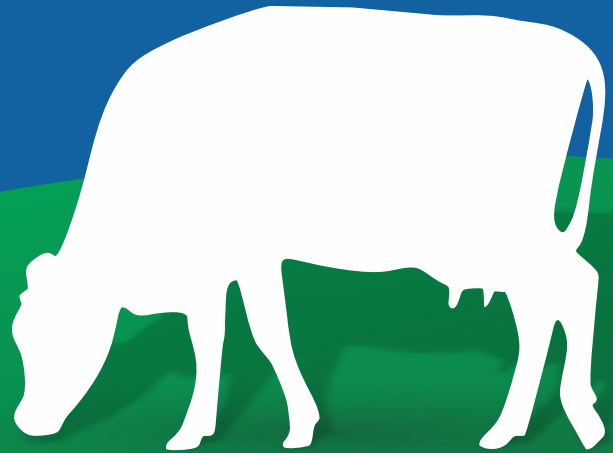


**LIPO EN+
KETOSIS PREVENTER**



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[®] 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[®]
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

www.biosintnutraceuticals.com



From the Pen of Chief Editor



Strengthening Disease Prevention in Cattle for a Sustainable Future

Disease prevention in cattle is a critical aspect of animal health management, global food security, economic stability, and environmental sustainability. As cattle farming intensifies to meet growing demands, the risk of disease outbreaks increases, making a proactive approach essential for sustainable cattle farming. Diseases like Foot-and-Mouth Disease (FMD), Bovine Respiratory Disease (BRD), and Bovine Tuberculosis (TB) can have devastating effects on cattle, leading to significant animal loss, productivity decline, and economic damage. Zoonotic diseases, which can be transmitted between animals and humans, pose an even more severe threat.

Biosecurity measures, such as controlling animal movement, ensuring proper sanitation, and implementing quarantine protocols for new animals, are essential for safeguarding herds. Farmers must also limit exposure to potential vectors of disease, such as wildlife or contaminated water sources. Vaccination is another cornerstone of disease prevention, with regular vaccination schedules tailored to the specific needs and risks of the herd being vital for controlling endemic diseases. Vaccines not only prevent disease outbreaks but also reduce the need for antibiotic use, combating the rise of antibiotic resistance.

Nutrition and environmental factors also play a crucial role in disease prevention. A well-nourished herd is more resilient to infections, as proper nutrition boosts the immune system. Ensuring balanced diets that meet the energy and nutrient needs of cattle, including vitamins and minerals, is fundamental in keeping animals healthy and resistant to infections. Environmental management, particularly in intensive farming systems, is another critical area, with overcrowded and unsanitary conditions increasing the risk of disease transmission. Stress management is often overlooked, but it is essential to reducing the risk of stress-induced diseases that commonly occur in feedlots and dairy farms.

Early detection through regular health monitoring is vital, and advances in technology now make it easier for farmers to track cattle health through wearable sensors and other diagnostic tools. Veterinary involvement is crucial in this regard, as routine health checks and diagnostic tests can help identify subclinical diseases that may be affecting productivity without obvious symptoms.

Effective disease prevention in cattle requires coordinated efforts from government agencies, veterinary services, and the agricultural industry as a whole. Governments must offer subsidies for vaccinations, funding disease monitoring programs, and providing training on best practices for disease prevention. Farmers must also work together, sharing knowledge and experiences to tackle common challenges. Farming cooperatives and associations can serve as valuable platforms for disseminating information on disease outbreaks, treatment options, and new disease prevention technologies. Open dialogue between farmers and veterinarians will ensure that cattle health management remains adaptive and responsive to emerging risks.

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

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

Biosint	03
Ecolex Animal Nutrition	01
Irides	47
Pixie Expomedia	02
The Dairy Expo	48

PRESS RELEASE

CLFMA OF INDIA Welcomes Its New Dynamic Leadership Team (2024-2026) **22**



Kamdhenu University (KU) signs MoU with Qper India Pvt Ltd (QIPL) for joint research on optimizing ... **25**

On October 15, 2024, Optima Life Sciences hosted an engaging Technical Seminar with Topic "Understanding ... **26**



Optima Life Sciences Inaugurates New State-of-the-Art Manufacturing Facility in Jejuri, Pune, Maharashtra. **28**

ICAR-NIVEDI's WOAH Reference Laboratory for PPR inaugurated **31**

Skill development training programme on livestock and poultry production along with their scientific ... **32**

ARTICLE

Page 06 Bovine Respiratory Disease (BRD) in Cattle
Siddhi Gupta and Parth Rai Gupta

Page 09 The Impact of Acidosis on Cattle: Signs to Watch For and How to Treat It
Siddhi Gupta and Parth Rai Gupta

Page 14 Common Calf Diseases: Symptoms, Prevention, and Treatment
Siddhi Gupta and Parth Rai Gupta

Page 17 Tackling FMD in Cattle: Best Practices for Herd Health Management
Siddhi Gupta and Parth Rai Gupta

Page 20 Mastitis in Dairy Cows and Buffaloes
Siddhi Gupta and Parth Rai Gupta

04 Editorial	46 Editorial Calendar
33 News	46 Subscription Form





Bovine Respiratory Disease (BRD) in Cattle

Siddhi Gupta and Parth Rai Gupta
Co-Editor

Introduction

Bovine Respiratory Disease (BRD), also known as "Shipping Fever," is one of the most prevalent and economically devastating diseases in the cattle industry. It primarily affects the respiratory system of cattle, especially young animals such as calves and those recently weaned or transported. BRD is not a single disease but a syndrome caused by multiple factors, including viral and bacterial infections, stress, and environmental conditions. Its economic impact is considerable, affecting production through decreased weight gain, increased treatment costs, and mortality.

I. Understanding BRD

BRD affects the lungs and lower

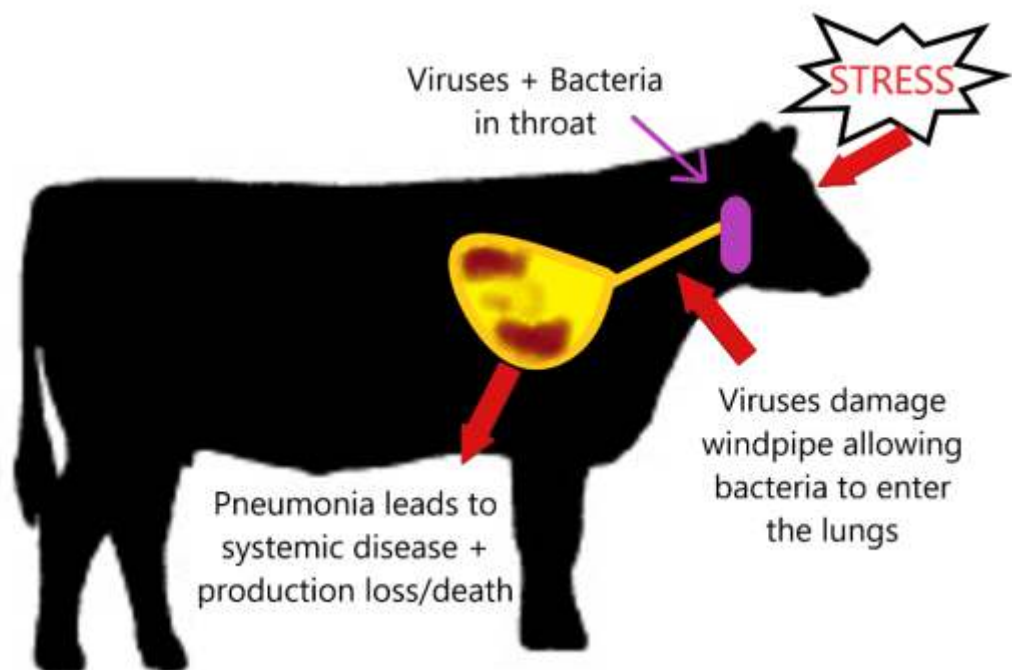
respiratory tract, leading to pneumonia in cattle. It is particularly common in feedlot cattle but can also affect dairy calves and adult cattle under stress. The condition can range from mild to severe and, if left untreated, can lead to death.

II. Symptoms of BRD

The symptoms of BRD vary depending on the severity of the infection and the pathogens involved. Early detection is critical for successful treatment, and farmers should watch for the following signs:

Respiratory Symptoms

- **Coughing:** A persistent dry or wet cough is a common early sign.
- **Nasal Discharge:** Mucus discharge from the nose, often



clear initially but can become yellow or green with bacterial infection.

- **Labored Breathing:** Rapid or shallow breathing, difficulty breathing (dyspnea), and open-mouth breathing in severe cases.
- **Frothy Saliva:** Frothy saliva around the mouth may indicate advanced lung damage.

Systemic and Behavioral Symptoms

- **Fever:** A common early symptom, with temperatures often exceeding 104°F (40°C).
- **Lethargy:** Affected animals show reduced activity, sluggish movement, and unwillingness to graze or move.
- **Loss of Appetite:** Reduced feed intake leading to weight loss.
- **Depression:** Cattle may exhibit a "head down" posture, isolation from the herd, and general weakness.
- **Rapid Weight Loss:** Decreased feed efficiency and rapid weight loss in affected cattle.

III. Causes of BRD

BRD is a multifactorial disease, meaning that it arises from a combination of infectious agents and predisposing factors such as stress and environmental conditions. The disease is often triggered by the interplay between these factors.

Infectious Agents

BRD is caused by a combination of viral and bacterial pathogens:

Viral Infections

- **Bovine Herpesvirus 1 (BHV-1):** Responsible for infectious bovine rhinotracheitis (IBR), it damages the respiratory tract and weakens the immune response.
- **Bovine Respiratory Syncytial Virus (BRSV):** A common virus that causes lung inflammation and damage.



- **Bovine Viral Diarrhea Virus (BVDV):** While primarily associated with digestive issues, BVDV also suppresses the immune system, making cattle more susceptible to secondary bacterial infections.
- **Parainfluenza Virus Type 3 (PI3):** This virus affects the lower respiratory tract and leads to lung damage, making the animal vulnerable to bacterial infections.

Bacterial Infections

Secondary bacterial infections often follow viral damage, leading to severe pneumonia. The most common bacteria involved in BRD include:

- **Mannheimia haemolytica:** Causes severe pneumonia by releasing toxins that damage lung tissues.
- **Pasteurella multocida:** Commonly associated with chronic infections.
- **Histophilus somni:** Can cause respiratory infections and systemic infections.
- **Mycoplasma bovis:** A bacterial agent that is difficult to treat and can cause chronic pneumonia.

Stress Factors

Stress is a major predisposing factor

that weakens the immune system, allowing viruses and bacteria to infect the respiratory tract. The main sources of stress include:

- **Weaning:** Abrupt separation from the mother is a significant stressor.
- **Transportation:** Long journeys in crowded and poor conditions contribute to BRD, hence the term "shipping fever."
- **Overcrowding:** In feedlots, overcrowding increases stress levels and facilitates the spread of infectious agents.
- **Nutritional Deficiencies:** Poor nutrition, especially a lack of essential vitamins and minerals like Vitamin E, selenium, and copper, can impair the immune system.

Environmental Factors

- **Poor Ventilation:** Lack of airflow in barns or feedlots allows respiratory pathogens to accumulate.
- **Sudden Weather Changes:** Fluctuations in temperature or humidity can exacerbate respiratory issues.
- **Dust and Ammonia:** High levels of dust or ammonia in barns can irritate the respiratory system and

predispose cattle to infections.

IV. Diagnosis of BRD

Diagnosing BRD requires a combination of clinical observation and laboratory tests. Veterinarians may perform the following to confirm the presence of BRD:

- **Clinical Signs:** Observation of respiratory symptoms, fever, and changes in behavior.
- **Auscultation:** Listening to the lungs with a stethoscope to detect abnormal lung sounds such as wheezing, crackles, or decreased airflow.
- **Laboratory Tests:** Blood tests, nasal swabs, or lung tissue samples may be used to identify the specific viral or bacterial pathogens responsible.
- **Ultrasound/X-ray:** Imaging can be used to assess lung damage in severe cases.

V. Treatment of BRD

Early intervention is critical for effective BRD treatment. Treatment typically involves a combination of antibiotics to address bacterial infections and supportive care to help the animal recover.

Antibiotics

Antibiotic treatment is essential for controlling bacterial infections associated with BRD. The choice of antibiotic depends on the pathogen and the severity of the infection. Commonly used antibiotics include:

- **Florfenicol:** Effective against *Mannheimia haemolytica* and other BRD pathogens.
- **Tilmicosin:** A macrolide antibiotic used for treating respiratory infections.
- **Oxytetracycline:** Broad-spectrum antibiotic often used in cases of mixed bacterial infections.
- **Enrofloxacin:** A fluoroquinolone

that targets a wide range of bacterial pathogens.

It's important to follow veterinary guidance regarding antibiotic dosage and duration to prevent antibiotic resistance.

Anti-inflammatory Drugs

Non-steroidal anti-inflammatory drugs (NSAIDs) such as flunixin meglumine are often administered to reduce fever, inflammation, and pain.

Supportive Care

Supportive care is essential for promoting recovery. This may include:

- **Fluids:** To prevent dehydration and maintain electrolyte balance.
- **Nutritional Support:** Providing easily digestible, nutrient-rich feed to promote weight gain and recovery.
- **Oxygen Therapy:** In severe cases, oxygen supplementation may be required.

VI. Prevention of BRD

Preventing BRD requires a multifaceted approach involving proper management practices, vaccination, and minimizing stress.

Vaccination

Vaccination is a critical preventive measure against viral and bacterial agents that cause BRD. Common vaccines used to prevent BRD include:

- IBR (BHV-1) Vaccine
- BVDV Vaccine
- BRSV Vaccine
- PI3 Vaccine
- *Mannheimia haemolytica* and *Pasteurella multocida* Vaccines

It is important to develop a vaccination program in consultation with a veterinarian to ensure optimal protection for the herd.

Stress Reduction

Minimizing stress is key to

preventing BRD. Some strategies include:

- **Proper Weaning Practices:** Gradual weaning or "fence-line weaning" can reduce stress.
- **Transportation Management:** Reducing the duration of transport and ensuring proper ventilation and space during transport can help minimize stress.
- **Proper Handling:** Gentle handling techniques reduce stress, which helps maintain a strong immune system.

Environmental Control

- **Ventilation:** Ensure good airflow in barns and feedlots to reduce pathogen buildup.
- **Cleanliness:** Regularly clean barns and feedlots to minimize dust, ammonia, and waste accumulation.
- **Nutrition:** Provide a balanced diet with adequate vitamins and minerals to boost immune function.

Early Detection and Isolation

Implement regular monitoring of cattle for early signs of BRD. Isolating sick animals promptly prevents the spread of infection to the rest of the herd.

Conclusion

Bovine Respiratory Disease (BRD) is a serious challenge in cattle farming, requiring timely intervention, effective treatment, and comprehensive preventive measures. Early detection and proper management of stress and environmental conditions are essential in reducing the incidence of BRD. By focusing on preventive strategies such as vaccination, environmental control, and stress reduction, farmers can protect their herds from the devastating effects of this respiratory disease.



The Impact of Acidosis on Cattle: Signs to Watch For and How to Treat It

Cattle, especially those raised under intensive feeding regimens, are susceptible to acidosis, a frequent metabolic disease. It happens when the rumen's pH drops as a result of a buildup of acidic materials. If this problem is not quickly detected and treated, it may negatively impact the welfare, productivity, and health of cattle.

There are two main ways that acidosis in cattle might appear:

Acute Acidosis: This happens when cattle eat a lot of quickly fermentable carbohydrates, which causes the pH of their rumen to decrease quickly (usually below 5.5). Severe clinical signs include diarrhoea, dehydration, rumen stasis, and in extreme situations, mortality, are usually linked to acute acidosis.

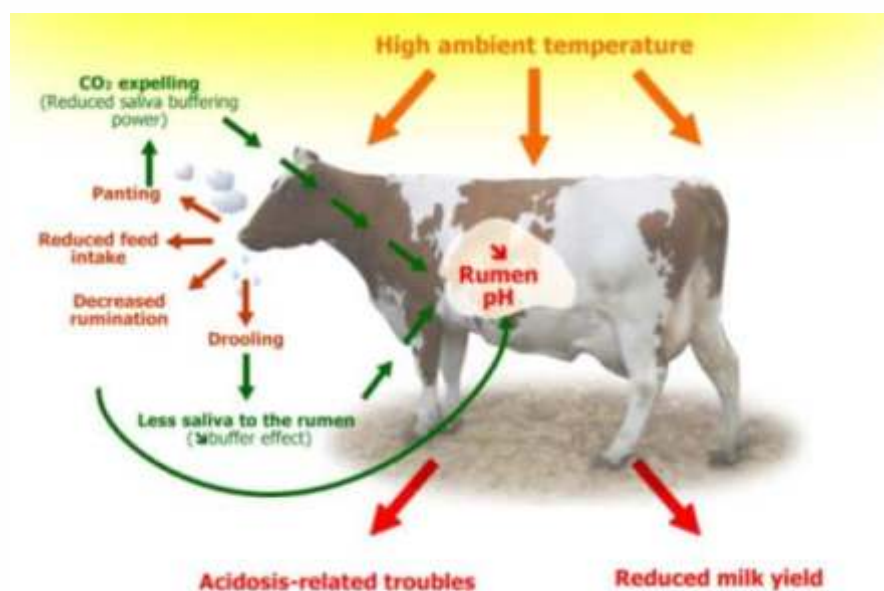
Subacute Acidosis: Long-term mild to moderate rumen pH drop

(between 5.5 and 6.0) is a hallmark of subacute acidosis, sometimes referred to as chronic or low-grade acidosis. Over time, subacute acidosis may negatively impact rumen function, feed efficiency, and overall animal performance even though it may not show any overt clinical symptoms.

Causes of Acidosis

Diets High in Concentration: With advantages including effective growth, increased feed conversion, and greater performance, high concentrate diets are crucial for contemporary beef and dairy production systems. For calves that develop quickly, these diets, which are composed of grains and protein sources, provide a concentrated supply of energy and protein. Complex carbs and fibre are broken down into volatile fatty acids (VFAs) in the rumen, a specialised

Siddhi Gupta and Parth Rai Gupta
Co-Editor



fermentation chamber located in the foregut. However, by adding large amounts of fermentable carbs, high concentration diets may upset this equilibrium, causing lactic acid buildup and fast fermentation. Furthermore, insufficient amounts of roughage or forage are often seen in high concentration diets, which lowers the rumen's buffering ability and increases its susceptibility to pH changes. Saliva production may be decreased by consuming less roughage, which further jeopardises the maintenance of rumen pH.

Abrupt Dietary Changes: Cattle that experience abrupt dietary changes may have metabolic abnormalities such as acidosis as a result of the disturbance of the rumen environment. This is because the rumen's complex microbial community is in charge of digesting feedstuffs. Rumen pH variations brought on by abrupt changes in food composition, particularly those involving changes in fermentable carbohydrate levels, may raise the risk of acidosis and metabolic diseases. In reaction to these modifications, cattle may show selective eating or reduced feed intake, particularly if the new diet is strange or disagreeable. This may worsen pH imbalances in the rumen and impair the use of nutrients.

Overconsumption of Grain: A number of variables, including behavioural issues, incorrect feeding, and subpar management techniques, make grain overconsumption in cattle a serious health concern. It may result in digestive issues, rumen acidity, and metabolic disruptions. Genetic predispositions, individual differences in feeding behaviour, and inadequate feed bunk management may all lead to



overconsumption.

Cattle are more likely to overconsume if feeding schedules are irregular or deliveries are infrequent. Grain overconsumption may interfere with the rumen's ability to digest carbohydrates effectively, which results in an overabundance of lactic acid and volatile fatty acids. This makes cattle more susceptible to rumen acidosis by lowering the pH of the rumen.

Additionally, excessive grain intake upsets the rumen's microbial population balance, impairing feed

efficiency and nutrient utilisation. Cattle performance, including growth rates, feed conversion efficiency, milk output, and reproductive function, is adversely affected by excessive grain intake.

Stress: Environmental, nutritional, social, and managerial stress are some of the elements that affect cattle output. Cattle production, welfare, and health may all suffer from prolonged stress. Cattle comfort may be impacted by environmental stressors including high temperatures and poor air quality. Metabolic health may be

impacted by nutritional stress, which includes abrupt dietary changes and competition for resources.

Aggression and social displacement may result from social stress brought on by social hierarchy. Injuries, reproductive issues, disease outbreaks, parasite infestations, and medical procedures may all cause physiological stress reactions that impair immune system performance and general health. Immunosuppression, heightened vulnerability to illnesses, poor reproductive outcomes, and behavioural abnormalities may all result from prolonged stress.

Symptoms of Acidosis

Lethargy and Depression:

Lethargy and depression are typical symptoms of discomfort in cattle that point to possible welfare or health problems. Reduced activity levels, seclusion, strange postures, decreased feed intake, and diminished vocalisations are some indicators of these symptoms. When cattle are depressed, they may lie down more and be reluctant to complete everyday tasks. Additionally, they could consume less or selectively, displaying a lack of interest in or reluctance to approach meal sources. They could also lack the brightness and alertness that are usually associated with healthy people, and their eyes may have a lifeless or dull appearance.

Reduced Feed Intake: Cattle that consume less feed may grow more slowly, perform worse, and have their health and wellbeing damaged. Reduced feed consumption by cattle leads to lower daily intake levels and smaller meal portions. They could engage in selective eating, which would result in an unbalanced intake of

nutrients and a weakened nutritional state. Additionally, they could eat more slowly and hesitantly, taking longer to finish their meals. Individuals may sort feed in group-housed cattle as a sign of discontent with the composition or palatability of their meal. Visual examination or body condition score might reveal weight loss, poor body condition, and decreased muscle mass as a consequence of prolonged or severe feed intake reductions.

Diarrhoea: Dehydration, electrolyte imbalances, and impaired food absorption are all consequences of diarrhoea, a frequent gastrointestinal ailment in cattle. It is characterised by loose, watery stools that might vary in colour, consistency, and smell. In addition to having sunken eyes, dry mucous membranes, decreased skin elasticity, and decreased urine production, cattle suffering from diarrhoea may also defecate more often. In addition to systemic symptoms including electrolyte imbalances and dehydration, diarrhoea may induce fatigue, sleepiness, and a reluctance to move. Due to possible nutrition absorption and utilisation issues, prolonged or severe diarrhoea might result in weight loss and

poor physical condition.

Rumen Distention: The buildup of gases, mostly carbon dioxide and methane, in the rumen causes rumen distention, also referred to as bloat, a digestive condition in cattle. Visible bloating or swelling of the left flank area, which may seem enormous, rounded, or taut, is the disorder's defining feature. The rumen may induce respiratory distress, restlessness, discomfort, agitation, decreased feed intake, and decreased appetite in extreme situations. The pain and physical strain may also cause the inflated cow to become weak, sluggish, or hesitant to move.

Subclinical Symptoms: In cattle, subclinical symptoms are imperceptible indications of underlying medical conditions that may have an effect on profitability, productivity, and animal welfare. Changes in activity level, social contacts, dietary habits, and posture are a few examples of these indicators. Nutritional imbalances or inadequacies may be identified with the use of body condition score (BCS) monitoring. Changes in production measures, such as milk output, average daily gain, or reproductive success, might potentially be subclinical indicators.



Subclinical health problems may be identified before they develop into clinical illness by using diagnostic procedures such as blood chemistry panels, faecal analysis, or milk quality evaluations. For early detection, routine health tests and monitoring initiatives are crucial. Subclinical indicators often appear before the disease's clinical symptoms, offering a chance for intervention.

Strategies for Management and Treatment

Gradual Diet Transitions:

Fermentation and digestion depend on the rumen, a critical microbial habitat in cattle. By allowing rumen microorganisms to adjust to changes in feed composition, gradual diet transitions improve nutrient utilisation and efficiency. These changes minimise disruptions, lower the chance of bloat or rumen acidity, and encourage the best possible absorption of nutrients. Quick dietary changes may cause feeding behaviour and intake patterns to shift, which lowers feed consumption and raises welfare issues.

Gradual transitions entail gradually introducing new feedstuffs, combining new feedstuffs with current diets, replacing a part of the

existing diet with new feedstuffs, and making incremental modifications. This promotes consistent fermentation patterns, ideal rumen health, and less stress, all of which improve the herd's general wellbeing.

Supplementing with Fibre:

Supplementing with fibre is crucial for the productivity, digestion, and general health of cattle. Although dietary fibre mostly comes from forages, other sources may assist satisfy nutritional requirements, encourage rumination, and avoid digestive issues. Fibre promotes healthy rumen microorganisms and improves microbial activity, pH stability, and rumen function.

Along with providing more calories, protein, and minerals, it also controls feed intake and encourages satiety. Hay, straw, grass, silage, agricultural byproducts, specialised forage additives, and fibre blocks are examples of common roughage sources for fibre supplementation. The best use of dietary fibre is ensured by balancing diets according to forage availability, nutritional requirements, and production stage.

Feed additives are chemicals added to livestock diets to improve animal health, feed efficiency, and

production results. These consist of acidifiers, enzyme additions, probiotics, prebiotics, antibiotics, and antioxidants. These additives aid in cattle's better absorption, digestion, and use of nutrients.

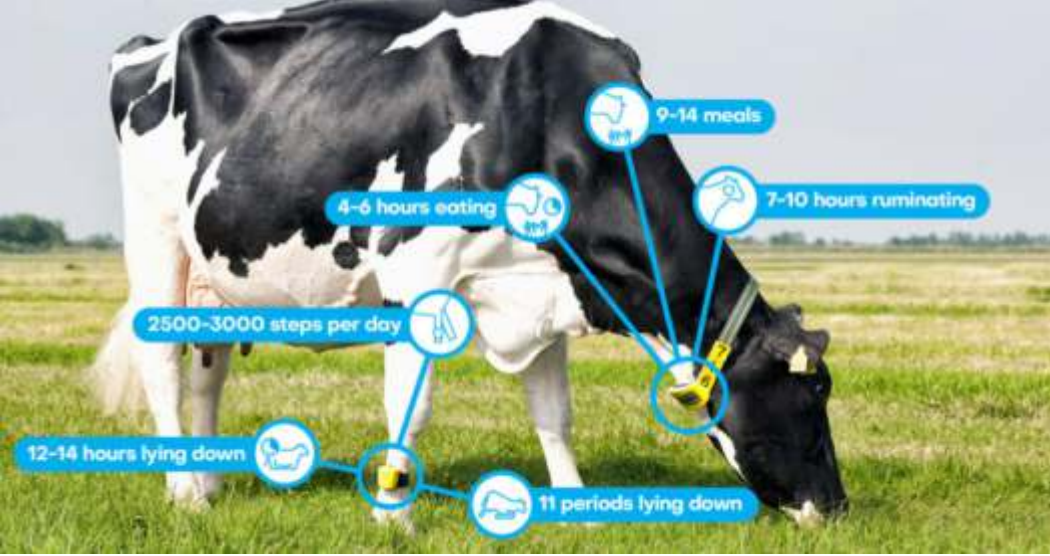
Acidifiers reduce the pH of the rumen, enzymes break down complex carbohydrates, antibiotics regulate bacterial infections, probiotics maintain gut health, prebiotics boost microbial diversity, and antioxidants guard against oxidative stress. Feed additives lower the risk of metabolic diseases and manage bacterial infections by promoting rumen health, microbial balance, and digestive function. For the use of feed additives in cow diets, regulatory compliance is essential.

Monitoring and Early Detection:

To find possible health problems before they become serious ones, cattle health management systems need proactive monitoring and early detection. Regular visual inspections, bodily condition grading, physical tests, and abnormality detection are important factors to take into account. To see patterns, it's important to keep accurate records on cattle health, including vaccination history, treatment, reproductive success, and illness incidence.

To identify subclinical illnesses, nutritional deficiencies, or metabolic abnormalities, diagnostic procedures like as blood testing, faecal analysis, milk quality evaluations, and pathogen screening should be used. To stop infectious illnesses from entering and spreading throughout the herd, biosecurity measures, quarantine restrictions, stringent cleanliness guidelines, and animal movement monitoring should be put into place.





Stress Management: In production systems, stress management is essential for the productivity, welfare, and health of cattle. Overstress may impair general wellbeing, immune system function, and reproductive efficiency. Assessing environmental conditions, giving sufficient shelter, ventilation, and space, analysing handling procedures, using low-stress handling techniques, appropriate facilities, and progressive acclimatisation are all examples of effective stress management tactics.

Stress levels may also be decreased by addressing social variables such as grouping tactics and herd dynamics. Stress may be decreased by using low-stress management

strategies, improving the surroundings, and encouraging constructive social connections. Immune system and gut health may be enhanced by a well-balanced diet and supplements. A healthy cow herd depends on regular behaviour and physical condition observations, stress management training for farm staff, and cooperation with veterinary specialists.

Veterinary Assistance: For cattle herds to remain healthy, happy, and productive, veterinary intervention is essential. By offering farmers knowledge, direction, and assistance, veterinarians are essential to the prevention, diagnosis, treatment, and management of herd health. To

stop disease outbreaks and improve herd health, they create and carry out health monitoring plans that include physical exams, diagnostic tests, immunisation schedules, and parasite control methods.

In order to shield cattle from infectious illnesses, they also suggest and give vaccinations. In addition to doing post-mortem exams and clinical assessments, veterinarians also administer drugs, treatments, and management techniques, provide emergency care, and educate the public on the best practices for managing the health of cattle.

In conclusion, cattle, especially those kept in intensive feeding regimes, are at serious danger for acidosis. Producers may avoid and lessen the negative effects of acidosis on the production and health of their cattle by being aware of the causes, signs, and management techniques described in this article. Maintaining ideal rumen function and general herd wellbeing requires careful observation, timely intervention, and a balanced and well-managed feeding schedule.





Common Calf Diseases: Symptoms, Prevention, and Treatment

Siddhi Gupta and Parth Rai Gupta
Co-Editor

Raising healthy calves is crucial for a productive dairy or beef herd. However, calves are vulnerable to a variety of diseases, especially in the first few months of life. Early detection and proper management can significantly reduce mortality and improve calf health. Below are detailed descriptions of some of the most common diseases affecting calves, along with their symptoms, prevention strategies, and treatment protocols.

1. Scours (Calf Diarrhea)

Symptoms

- **Diarrhea:** Watery, loose feces that may range from yellowish to greenish-brown in color.
- **Dehydration:** Sunken eyes, dry mouth, and loss of skin elasticity.
- **Weakness:** Calves may appear lethargic and reluctant to feed.
- **Rapid Breathing:** Calves with

severe dehydration or acidosis may pant or breathe heavily.

Prevention

- **Colostrum Management:** Ensure calves receive adequate amounts of high-quality colostrum (10% of body weight) within the first 6 hours after birth to build strong immunity.
- **Hygiene:** Clean and disinfect calving areas, feeding equipment, and calf pens regularly.
- **Proper Nutrition:** Provide milk replacers and feeds that are high-quality, clean, and free from contaminants.
- **Vaccination:** Vaccinate pregnant cows against scours-causing pathogens (e.g., rotavirus, coronavirus, E. coli).

Treatment

- **Rehydration:** Oral rehydration solutions (ORS) with electrolytes,





glucose, and bicarbonates are essential to replace lost fluids and correct acidosis.

- **Isolation:** Sick calves should be isolated to prevent disease spread.
- **Veterinary Care:** If the condition worsens or does not improve, consult a veterinarian. Intravenous (IV) fluids or antibiotics may be needed.

2. Salmonellosis

Symptoms

- **Diarrhea:** Often accompanied by blood (dysentery) and foul-smelling feces.
- **Fever:** Calves usually exhibit high fevers, lethargy, and reduced appetite.
- **Sepsis:** In severe cases, salmonellosis can cause widespread infection (sepsis), leading to organ failure.
- **Pneumonia and Arthritis:** Chronic cases may present with respiratory distress or joint infections.

Prevention

- **Vaccination:** Administer vaccines to pregnant cows or calves against specific strains of Salmonella.
- **Biosecurity:** Practice strict hygiene by sanitizing feeding equipment, isolating new or sick animals, and controlling rodents and other vectors.
- **Colostrum:** Ensure calves receive sufficient antibodies through colostrum, as it boosts immunity.

Treatment

- **Antibiotics:** Early antibiotic intervention is critical, but it should be prescribed by a veterinarian based on susceptibility testing to avoid resistance.
- **Fluid Therapy:** Dehydrated calves should be given fluids (oral or IV) to rehydrate and manage electrolyte imbalances.
- **Isolation:** Infected calves must be isolated to prevent the

spread of the disease within the herd.

3. Pneumonia (Bovine Respiratory Disease Complex - BRD)

Symptoms

- **Coughing:** Persistent dry or wet cough.
- **Nasal Discharge:** Mucous discharge from the nose, which may be clear, yellow, or green.
- **Labored Breathing:** Increased respiratory rate and difficulty breathing.
- **Fever:** Body temperature often exceeds 104°F (40°C).
- **Poor Appetite:** Calves may lose interest in feeding and become lethargic.

Prevention

- **Housing:** Provide well-ventilated, dry, and clean housing to avoid high humidity and ammonia buildup.
- **Stress Reduction:** Minimize stressors like transportation, weaning, and sudden diet

changes, as stress weakens the immune system.

- **Vaccination:** Vaccinate against respiratory pathogens (e.g., Pasteurella, Mannheimia, Mycoplasma, and BRSV).
- **Colostrum:** Ensure early intake of quality colostrum to build immunity.

Treatment

- **Antibiotics:** Use antibiotics as prescribed by a veterinarian based on the causative agent.
- **Anti-inflammatory Drugs:** Non-steroidal anti-inflammatory drugs (NSAIDs) may be used to reduce fever and inflammation.
- **Supportive Care:** Provide ample fluids, maintain a warm environment, and minimize stress to support recovery.

4. Congenital Heart Defects

Symptoms

- **Poor Growth:** Calves may exhibit stunted growth due to poor circulation.
- **Weakness:** Reduced energy levels and reluctance to exercise.
- **Irregular Breathing:** Shortness of breath or panting, especially during feeding or mild exertion.
- **Heart Murmurs:** Veterinarians may detect abnormal heart sounds during routine checks.

Prevention

- There is no direct prevention for congenital heart defects, as they are genetic or developmental. Selecting breeding animals with no history of heart problems may reduce the occurrence in future generations.

Treatment

- **Veterinary Monitoring:** Regular check-ups with a vet to monitor heart function and manage symptoms.

- **Cardiac Stimulants:** Some medications may be prescribed to improve heart function.

- **Supportive Care:** Manage stress and avoid overexertion in affected calves. Some mild defects may improve as the calf grows.

5. Diphtheria (Calf Diphtheria or Necrotic Laryngitis)

Symptoms

- **Mouth Sores:** Ulcers or swelling on the gums, tongue, or inside the cheeks.
- **Difficulty Swallowing:** Affected calves may refuse to eat or drink.
- **Foul Breath:** A distinctive foul odor from the mouth due to infection.
- **Fever:** High fever and general signs of infection, such as lethargy.

Prevention

- **Oral Hygiene:** Maintain clean feeding equipment to reduce oral injuries.
- **Avoid Harsh Feeds:** Avoid feeding calves coarse, rough feeds that may cause mouth injuries.
- **Good Housing:** Keep calf environments clean and dry to reduce exposure to pathogens.

Treatment

- **Antibiotics:** Prompt treatment with broad-spectrum antibiotics can cure the infection. Consult a vet for the appropriate choice.
- **Pain Relief:** Anti-inflammatory medications may be used to reduce pain and fever.
- **Isolation:** Isolate affected calves to prevent the spread of bacteria.

6. Navel Ill (Omphalitis)

Symptoms

- **Swollen Navel:** The umbilical area becomes swollen, warm, and painful.
- **Fever:** Calves may develop a fever due to the infection.
- **Pus:** In severe cases, pus may drain from the navel area.
- **Lethargy:** Affected calves often show reduced activity and appetite.

Prevention

- **Clean Environment:** Ensure calving areas are clean and dry to reduce the risk of infection.
- **Navel Care:** Dip the navel in iodine or other disinfectants shortly after birth to prevent infection.
- **Colostrum Intake:** Strong immune defense starts with proper colostrum intake within the first few hours after birth.

Treatment

- **Antibiotics:** Early administration of antibiotics can prevent the infection from spreading.
- **Drainage:** In severe cases, the abscess may need to be drained by a veterinarian.
- **Supportive Care:** Keep the calf hydrated and monitor for signs of sepsis or joint infections.

By maintaining good management practices such as proper hygiene, nutrition, and vaccination, farmers can prevent many of these common calf diseases. Early detection and treatment are key to minimizing losses and ensuring calves develop into healthy, productive adults. Always consult a veterinarian for accurate diagnosis and treatment plans tailored to your farm's specific needs.



Tackling FMD in Cattle: Best Practices for Herd Health Management

Introduction

Foot-and-mouth disease (FMD) is a highly contagious viral disease that affects cloven-hoofed animals, including cattle. FMD is one of the most economically devastating livestock diseases worldwide due to its rapid spread and severe impact on livestock productivity. Understanding its causes, symptoms, and effective management strategies is crucial for cattle farmers and livestock managers to prevent outbreaks and minimize losses.

Causes of FMD in Cattle

FMD is caused by the **Foot-and-Mouth Disease Virus (FMDV)**, which belongs to the genus Aphthovirus within the family Picornaviridae. There are seven known serotypes of the virus: A, O, C, SAT 1, SAT 2, SAT 3, and Asia 1, each with multiple strains. The virus can spread rapidly

through direct contact between infected and susceptible animals or indirectly via contaminated equipment, feed, vehicles, or people.

Key modes of transmission include:

- **Direct Contact:** Infected cattle can spread the virus through their saliva, urine, feces, milk, and even breath.
- **Airborne Transmission:** The virus can spread over long distances, especially in humid climates, through aerosols exhaled by infected animals.
- **Fomites:** Equipment, clothing, and vehicles that come into contact with infected animals can carry the virus.
- **Contaminated Feed and Water:** Shared feeding and drinking facilities may serve as points of infection.
- **Movement of Animals:** The

Siddhi Gupta and Parth Rai Gupta
Co-Editor





movement of infected animals between farms or markets significantly contributes to disease outbreaks.

Symptoms of FMD in Cattle

FMD has an incubation period of 2 to 14 days, and clinical signs can vary depending on the severity of the infection. Symptoms typically include:

- **Fever:** Infected cattle often exhibit a sudden onset of fever, typically rising to 40°C (104°F) or higher.
- **Blisters (Vesicles):** One of the hallmark symptoms is the appearance of fluid-filled blisters, or vesicles, primarily on the tongue, gums, lips, nostrils, and between the toes or around the hooves.
- **Lameness:** As vesicles develop on the hooves, cattle may experience pain and difficulty walking, leading to lameness.

- **Salivation and Mouth Lesions:** Excessive salivation and drooling are common, along with the formation of sores in the mouth due to ruptured blisters.
- **Weight Loss and Reduced Milk Production:** Infected cattle often experience reduced appetite and difficulty eating due to mouth lesions, leading to weight loss and a significant drop in milk production.
- **Abortion:** Pregnant cows may abort due to the systemic effects of the virus.
- **Death in Young Animals:** Although adult cattle often survive the disease, FMD can be fatal in calves due to heart inflammation (myocarditis).

Management Strategies for FMD in Cattle

Managing FMD in cattle involves a combination of preventive measures, rapid detection, and

containment strategies. Once FMD is suspected, immediate action is required to prevent the virus from spreading.

1. Biosecurity Measures

- **Isolation of Infected Animals:** Infected cattle should be isolated immediately to prevent contact with healthy animals.
- **Disinfection:** Thoroughly disinfect equipment, clothing, and vehicles that have been in contact with infected animals. Regular use of disinfectants such as citric acid, sodium hydroxide, or formaldehyde can help control the spread of the virus.
- **Restricted Movement:** Quarantines and movement restrictions must be enforced to prevent the virus from spreading between farms or regions.
- **Clean Water and Feed:**

Ensure that cattle have access to uncontaminated feed and water to reduce the risk of viral transmission through these resources.

2. Vaccination

- **FMD Vaccination Programs:** Vaccination is one of the most effective tools in preventing FMD outbreaks. The selection of the vaccine depends on the specific serotype circulating in the region. Regular vaccination programs, particularly in high-risk areas, can significantly reduce the incidence of the disease.
- **Booster Doses:** Since immunity from FMD vaccines can wane over time, booster doses are necessary to maintain adequate immunity in the herd.
- **Monitoring Vaccine Effectiveness:** It's important to monitor the efficacy of vaccines and adjust vaccination protocols if new strains or serotypes of the virus emerge.

3. Early Detection and Reporting

- **Routine Monitoring:** Regular health checks and monitoring for clinical signs of FMD are crucial for early detection. Early identification of symptoms such as fever, lameness, or blisters can lead to prompt containment actions.
- **Immediate Reporting:** FMD is a notifiable disease in many countries. Farmers and veterinarians must report any

suspected cases to local authorities to initiate quarantine measures and control efforts.

4. Culling and Depopulation

- **Culling Infected Animals:** In the event of a confirmed FMD outbreak, infected and exposed animals may need to be culled to contain the virus. This is often a last resort in countries aiming for complete eradication of the disease.
- **Safe Disposal:** Proper disposal of animal carcasses is essential to prevent environmental contamination and further spread of the virus. Methods such as incineration or burial in lined pits are commonly used.

5. Zoning and Movement Control

- **Establish Disease-Free Zones:** Create disease-free zones by restricting animal movements between affected and unaffected areas. This helps prevent the virus from spreading to new regions.
- **Movement Control:** Enforce strict movement controls on livestock, equipment, and personnel in and out of the quarantined zones. Temporary bans on livestock markets or shows may be necessary during an outbreak.

6. Herd Health Management

- **Strengthen Herd Immunity:** Regular vaccinations and maintaining a healthy herd through good nutrition and stress reduction can improve overall resistance to infections.

- **Minimize Stress:** Stress can weaken cattle's immune response, making them more vulnerable to diseases like FMD. Provide adequate shelter, minimize overcrowding, and ensure a consistent feeding routine to reduce stress.

7. Public Awareness and Farmer Education

- **Training for Farmers:** Educating farmers and farmworkers about the signs of FMD, biosecurity measures, and vaccination protocols is key to early detection and prevention.
- **Awareness Campaigns:** Governments and agricultural bodies should run awareness campaigns to inform the public and livestock owners about FMD risks, control measures, and the importance of vaccination.

Conclusion

Foot-and-mouth disease in cattle is a severe threat to livestock production and the economy. Rapid spread and severe productivity losses make it one of the most feared livestock diseases worldwide. By implementing stringent biosecurity measures, regular vaccination, and early detection, farmers and livestock managers can significantly reduce the risk of FMD outbreaks. While culling infected animals may be necessary in severe outbreaks, prevention through robust management practices is the most effective strategy to safeguard cattle herds from FMD.



Mastitis in Dairy Cows and Buffaloes

Siddhi Gupta and Parth Rai Gupta
Co-Editor

Introduction

Bovine mastitis, a persistent inflammation of the mammary gland, is one of the most common and economically impactful diseases in dairy farming, affecting both cows and buffaloes worldwide. It primarily results from infections caused by microorganisms, including bacteria, fungi, viruses, and mycoplasma, or physical trauma. Mastitis not only affects the health and well-being of the animals but also reduces milk yield and degrades milk quality, leading to substantial financial losses for dairy farmers.

Understanding Mastitis

Mastitis is an inflammation of the udder, commonly caused by bacterial infections, but also by fungi or other microorganisms. Its severity ranges from subclinical, where no visible symptoms are present, to clinical cases, where clear signs of infection such as swelling, heat, and changes in milk consistency are evident.

Symptoms

- **Udder Inflammation:** Swelling,

redness, hardness, and heat in the mammary gland.

- **Pain and Discomfort:** The animal reacts aggressively to touch, often kicking during milking.
- **Milk Changes:** Presence of blood clots, foul-smelling brown discharge, and milk clots in the milk.
- **Reduced Milk Yield:** Milk production may be completely halted or significantly reduced.
- **Fever and General Discomfort:** Body temperature increases, appetite decreases, and animals exhibit limited mobility due to udder pain.
- **Severe Cases:** Mastitis can progress to toxemia or bacteremia, and if untreated, it may lead to death.

Early Detection

The California Mastitis Test (CMT) is a quick and effective method for detecting subclinical mastitis. Small milk samples are mixed with a reagent, and any thickening indicates



the presence of somatic cells (immune response to infection), helping detect the disease before visible symptoms arise.

Causes of Mastitis

Bacterial Infections

Bacteria like *Staphylococcus aureus* and *Streptococcus agalactiae* are common pathogens that enter through the teat canal. Other culprits include fungi such as *Aspergillus fumigatus*, *Candida* spp., and *Trichosporon* spp..

Environmental Factors

- **Contaminated Bedding:** Moist or dirty bedding, combined with poor ventilation, provides a favorable environment for bacterial growth.
- **Milking Equipment:** Unsanitary milking practices and equipment can introduce bacteria into the udder.
- **Housing Conditions:** Overcrowding, poor hygiene, and exposure to mud or contaminated water also contribute to infection risks.

Contagious Spread

Mastitis can spread within a herd through direct contact or via contaminated hands, milking machines, and clothing. Improper udder hygiene and milking infected animals before healthy ones are common ways contagious mastitis spreads.

Economic Impact on Dairy Farmers

Reduced Milk Production

Mastitis significantly reduces milk yield due to inflammation in the udder, leading to reduced milk flow and altered milk composition. The somatic cell count (SCC) rises, lowering milk quality and shelf life, which affects the marketability and profitability of the milk.

Quality and Reputation Loss

Milk from mastitis-infected animals is often rejected by dairy processors due to contamination with bacteria

and high SCC, leading to penalties or reduced prices. Repeated instances of poor-quality milk can also damage a dairy farm's reputation.

Treatment and Labor Costs

Veterinary care, medications, and increased labor for monitoring and treating sick animals add to the overall financial burden.

Prevention Strategies

Hygiene Practices

Proper hygiene during milking is essential for preventing mastitis:

- **Udder and Teat Cleaning:** Clean and dry the udder and teats before milking to remove dirt and bacteria.
- **Teat Dip:** Use post-milking teat disinfectants to reduce bacterial infection risk.
- **Bedding Management:** Regularly change or clean bedding to keep the environment dry and reduce bacterial contamination.

Teat Sealants

Teat sealants are used to prevent bacterial entry, particularly during the dry period when cows are not lactating.

Environmental Control

- **Ventilation:** Maintain well-ventilated housing to reduce moisture and bacterial growth.
- **Heat and Frost Control:** Minimize heat stress and prevent frostbite.
- **Bedding and Water Management:** Keep the udder clean by removing hair, preventing exposure to contaminated water, and reducing trauma to the udder.

Routine Monitoring

Regular monitoring of udder health through visual inspections and Somatic Cell Count (SCC) testing helps in early detection and management of mastitis. Routine record-keeping and health checks aid in identifying patterns and taking preventive actions.

Treatment Options

First Aid

- **Udder Milking:** Gently milk the affected quarter to relieve pressure.
- **Warm Compress:** Apply to reduce swelling and promote drainage.
- **Topical Treatments:** Use antimicrobial ointments or herbal udder creams to treat infection.

Medical Intervention

- **Antibiotics:** Prescribed based on the type of bacteria involved.
- **NSAIDs:** For pain and inflammation reduction.
- **Veterinary Care:** Critical for bacterial culture tests and appropriate treatment plans.

Milk Withholding

Infected cows' milk should be discarded, and infected quarters may need to be dried off. Milking healthy animals first, followed by infected ones, helps prevent cross-contamination.

Future Perspectives

Genetic Selection

Selective breeding for resistance to mastitis can help reduce the disease's prevalence in the herd over time.

Technological Solutions

The use of automated milking systems with built-in health monitoring and sensor technologies for early detection of mastitis can enhance early intervention and treatment, leading to better outcomes for the animals and dairy farmers.

Conclusion

Mastitis is a serious concern for dairy farmers due to its significant impact on both animal health and farm profitability. By adopting a proactive approach that includes proper hygiene, regular monitoring, and early intervention, the incidence of mastitis can be reduced. As technology advances, new tools will further improve the detection and management of mastitis, leading to healthier herds and more sustainable dairy operations.

CLFMA OF INDIA Welcomes Its New Dynamic Leadership Team (2024-2026)



CLFMA OF INDIA, a non-profit organization and the apex chamber representing the "One Voice" of the livestock industry, proudly announces its newly elected leadership team for the term 2024-2026. Established in 1967, CLFMA has played a pivotal role in promoting the animal husbandry sector, focusing on balanced animal nutrition to enhance productivity. Since 2002, it has grown to represent a diverse membership of over 250 stakeholders, including dairy, poultry, and aqua sectors, as well as feed additives manufacturers,

breeders, integrators, and vaccine producers.

On **20th September 2024**, the new Managing Committee and Office Bearers of CLFMA OF INDIA officially took the charge following the Election. The newly **elected Chairman for the period 2024-2026, Mr. Divya Kumar Gulati**, Managing Director of Nurture Technology, leads the association along with the other newly elected office bearers, an experienced and capable team, committed to driving innovation and growth in the Indian livestock sector.

A Legacy of Leadership

The outgoing Chairman, **Mr. Suresh Deora, Director of S.A. Pharmachem Pvt. Ltd.**, has been an instrumental force in CLFMA's recent success. Under his stewardship, CLFMA has grown in stature, building stronger government engagement and hosting numerous impactful seminars. Mr. Deora's expertise in human and animal nutrition, coupled with his significant influence in industry forums such as the Indian Red Cross Society and the India-China Chamber of Commerce and Industry, set a

high benchmark for the association. His dedication has been deeply appreciated, and his legacy will serve as a guiding light for future leaders.

Introducing CLFMA OF INDIA Chairman Mr. Divya Kumar Gulati

Bringing over 30 years of invaluable experience in healthcare, nutrition, and the food industry, Mr. Divya Kumar Gulati is well-poised to lead

CLFMA into its next chapter. As a pioneer of probiotic culture in Indian shrimp farming and a champion of sustainable farming technologies, Mr. Divya Kumar Gulati has a proven track record of introducing innovative solutions that have transformed industry standards. His ability to merge modern technologies with traditional ayurvedic herbal ingredients has yielded groundbreaking results in poultry and dairy farming.

For over 12 years, Mr. Divya Kumar Gulati has played a key role within CLFMA OF INDIA, most notably as Deputy Chairman. His participation and expertise in navigating government relations, especially with the Ministry of Fisheries, Animal Husbandry, and Dairying, has been instrumental in shaping policies that benefit the livestock industry.

CLFMA's New Leadership Team 2024-2026

Following Office Bearers were elected for the period 2024 – 2026:

1. **Chairman:** Mr. Divya Kumar Gulati, Nurture Aqua Technology Pvt. Ltd.
2. **Deputy Chairman:** Mr. Sumit Sureka, Shivshakti Agro (India) Pvt. Ltd.
3. **Deputy Chairman:** Mr. Naveen Pasupathy, Nanda Feeds Pvt. Ltd.
4. **Deputy Chairman:** Mr. Abhay Parnekar, Godrej Tyson Foods Ltd.
5. **Deputy Chairman:** Mr. Abhay Shah, Spectoms Engineering Pvt. Ltd.
6. **Honorary Secretary:** Mr. Nissar F. Mohammed, Coastal Exports Corporation
7. **Treasurer:** Mr. R. Ramkutty, Niswin Enterprises
8. **Immediate Past Chairman:** Mr. Suresh Deora, S.A. Pharmachem Pvt. Ltd.
6. **Honorary Secretary:** Mr. Nissar F. Mohammed, Coastal Exports Corporation
7. **Treasurer:** Mr. R. Ramkutty, Niswin Enterprises
8. **Immediate Past Chairman:** Mr. Suresh Deora, S.A. Pharmachem Pvt. Ltd.

The other members of the Managing Committee 2024-2026 comprises of:

9. Mr. Rajneesh KR Jha : Anmol Feeds Pvt. Ltd.
10. Mr. Balaram Bhattacharya : Avitech Nutrition Pvt. Ltd.
11. Mr. Vijay D. Bhandare : Bhavani Agrovvet Pvt. Ltd.
12. Dr. Prashant Shinde : Cargill India Pvt. Ltd.
13. Dr. Saikat Saha : Evonik India Pvt. Ltd.
14. Capt. (Dr.) A.Y. Rajendra : Godrej Agrovvet Ltd.
15. Mr. Anushrav Gulati : Herbs & Health Biotech Pvt. Ltd.
16. Dr. Devender Hooda : Huvepharma SEA (Pune) Pvt. Ltd.
17. Dr. Vijay Makhija : Intervet India Pvt. Ltd.
18. Mr. K A Sujit Chandan : Komarla Feeds & Foods Pvt Ltd
19. Mr. Anil M. : KSE Limited
20. Mr. R. Lakshmanan : Shanthi Feeds Pvt. Ltd.
21. Mr. Jaison John : U. S. Soybean Export Council, Inc.



With this new leadership team in place, CLFMA OF INDIA is poised to continue its mission of strengthening the livestock industry and fostering innovation, sustainability, and collaboration across sectors. Together, they aim to create a robust ecosystem that nurtures growth and addresses the evolving challenges of the industry.





Kamdhenu University (KU) signs MoU with Qper India Pvt Ltd (QIPL) for joint research on optimizing Livestock efficiency



this collaboration with QIPL is a step towards KU's commitment to enhance livestock research.

Mr Samir Patel, Managing Director of QIPL also expressed his optimism about the collaboration. "We are excited to partner with KU. This MoU will enable us to combine our

technological expertise with the university's research capabilities, paving the way for innovative solutions contributing to better livestock management in India.

Shortly, a couple of new research projects will be initiated with KU by Mr Harsh Patel, Director, QIPL



KU is a leading institute dedicated to veterinary and animal sciences based at Gandhinagar(Guj)

Signs MoU with QIPL, Anand(Guj) engaged in research & development of nutritional and Non-nutritional solutions for Poultry, Ruminant, and Fishery. The MoU signed on 26th September 2024 marks the beginning of a strategic partnership aimed at advancing research & innovation in the health & productivity of animals through cost-effective solutions.

Dr NH Kelwala , Vice-Chancellor of KU emphasized the importance of



On October 15, 2024, Optima Life Sciences hosted an engaging Technical Seminar with Topic "Understanding Causes of Lameness Incidences in Poultry and Strategies to Minimize it" at Amanora the Fern Hotels & Club, Pune.

The seminar was attended by more than 125 participants, primarily from the Poultry Farmers and Breeders Association (MH), along with prominent figures from the poultry industry across India.

analytical epidemiology as a tool to detect lameness. Dr. Pande shared the results from a clinical controlled trial (CCT), adjusting parameters based on findings from pilot and subsequent studies.

productivity. The study identified several key diagnostic indicators strongly associated with lameness, including elevated heterophil-to-lymphocyte (H/L) ratios, high serum phosphorus, and low levels of zinc and boron. Significant correlations were also noted between body weight, femoral length, bone curvature, and lameness. Dr. Pande highlighted the potential for future studies to predict



Dr Nivedita Pande

The Seminar opened with an impactful presentation by **Dr. Nivedita Pande** on addressing lameness in poultry. This session delved into the use of

This research aims to offer practical guidelines for reducing lameness in broilers raised in commercial settings, enhancing both health and



Dr U.C Patel





Dr. CV Chandrasekaran

subclinical lameness, enabling early intervention.

Following Dr Pande's presentation, **Dr. U.C. Patel** expert Nutritionist provided insights into the metabolic causes of lameness and the economic impacts of leg weakness. He emphasized the importance of mineral balance, particularly the relationship between calcium, phosphorus, and phytase, in preventing lameness. He also added that once lameness appears in a flock, simply increasing calcium and phosphorus is insufficient without addressing other underlying factors. He advised that mineral sources should be carefully analyzed for content and bioavailability.

Dr. CV Chandrasekaran, VP. Optima Life Sciences concluded by highlighting the role of improving calcium and phosphorus digestibility in reducing the risk of lameness. In light of these discussions, Optima Life Sciences introduced Ozyme P Advance, a

potent combination of potentiated phytase and boron. This product boasts unique features, including 10% higher activity than conventional phytase enzymes (measured in FTUs), protection against denaturation, and enhanced stability for a longer shelf life. With this innovative product launch, Optima Life Sciences aims to significantly contribute to the poultry industry by helping prevent lameness and improving overall flock health and productivity.

The Seminar, expertly organized by Director, Ms. Sakshi Kulkarni and study facilitated by Mr. Vinay Kulkarni, Executive Chairman, Optima Life Sciences concluded with a sense of optimism, setting the stage for further advancements in poultry health management.



Mr. Vinay Kulkarni and Ms. Sakshi Kulkarni





Optima Life Sciences Inaugurates New State-of-the-Art Manufacturing Facility in Jejuri, Pune, Maharashtra.

≡ OPTIMA ≡

Optima Life Sciences proudly announces the inauguration of its new manufacturing facility in Jejuri, a landmark achievement that underscores our commitment to innovation, quality, and community engagement in the animal sector. The facility was officially opened on 16th Oct 2024 in a ceremony attended by industry leaders, local government officials, and valued business partners.





Expanding Production Capacity

The newly inaugurated facility spans 4.5 acres and is equipped with cutting-edge technology designed to enhance production efficiency and quality. This facility represents a significant

investment in our operational capabilities, allowing us to scale our manufacturing processes to meet the increasing demand for our products.

"Our new plant in Jejuri is a game changer for Optima Life

Sciences," stated Mr. Vinay Kulkarni, Executive Chairman of Optima Life Sciences. "With advanced manufacturing capabilities and a commitment to quality, we are well-positioned to serve our customers better and respond to market needs with agility."

Advanced Technologies and Processes

The Jejuri facility features:

- **Advanced Nauta Mixer Technology:** This state-of-the-art 6 MT/Hr mixing solution enables precise ingredient integration, resulting in consistent and high-quality formulations with CV less than 0.1%.
- **Fully Pneumatic Transfer System:** This automated





system enhances efficiency by transporting materials without manual handling, minimizing contamination risks and improving safety.

Laboratory ensures rigorous testing and monitoring systems are in place to maintain the highest standards of product safety and efficacy.

- **Research and Development Labs:** Dedicated spaces for R&D will facilitate the development of new and innovative health products, driving our commitment to continuous improvement.

Commitment to Sustainability

Optima Life Sciences recognizes the importance of environmental stewardship. Our Jejuri facility incorporates several sustainable practices, including:

- **Energy Efficiency:** The plant utilizes energy-efficient machinery and renewable

- **Water Conservation:** Advanced water recycling systems are in place to reduce water usage and promote sustainability in manufacturing processes.

Our Plant Certifications

GMP - Good Manufacturing Practise Certified

HACCP – Hazard Analysis Critical Control Point Certified

ISO 22000 – 2018 – Food Safety Management System Certified

FAMI QS - Feed Additives and Premixtures Quality System Certification is focused on ensuring the quality and safety of feed additives and premixtures throughout the production process.

Future Outlook

With the inauguration of this GMP, HACCP, ISO, and FAMI QS certified facility, Optima Life Sciences is poised for growth and innovation in the animal nutrition and health sector. This expansion enhances our ability to develop and produce a wide range of health solutions, ultimately benefiting our customers and communities.

"As we look to the future, we are excited about the opportunities this facility presents for our company and the positive impact we can have on health and wellness globally," added Mr. Vinay Kulkarni.



- **Auto Bagging and Heat Sealing System:** This innovative packaging solution ensures accurate filling and secure sealing of products, enhancing shelf life and product integrity.

energy sources to minimize its carbon footprint.

- **Rack Storage System:** With a capacity of 750 MT, this system allows for efficient and organized storage of raw materials and finished goods, streamlining inventory management.
- **Quality Control Systems:** 310 Sq. Mt. Fully Equipped

- **Waste Management:** Effluent Treatment Plant for Sewage Water Treatment with capacity of 25KL



ICAR-NIVEDI's WOAH Reference Laboratory for PPR inaugurated



ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, World Organisation for Animal Health Reference Laboratory for Peste des Petits Ruminants (PPR) was inaugurated today by Dr Abhijit Mitra, Commissioner, Animal Husbandry, Dept of Animal Husbandry and Dairying, Govt of India.

Dr Divakar Hemadri, Assistant Director General (Animal Health), ICAR, and Dr A. Sanyal, Director, ICAR-National Institute of High-Security Animal Diseases, were present during the programme.

Dr Baldev R. Gulati, Director, ICAR-NIVEDI, emphasised the critical support from ICAR and the

Department of Animal Husbandry and Dairying (DAHD) in reaching this significant milestone.

This accomplishment highlights ICAR-NIVEDI's expanding role in global animal health and its continued contributions to veterinary epidemiology and disease control.

This state-of-the-art laboratory plays

a vital role in disease surveillance, diagnostic support, and capacity building for PPR across India. As one of only four WOAH Reference Laboratories worldwide for PPR, it solidifies India's leadership in the global fight against the disease. The lab, accredited with ISO17025:2017, is recognized internationally for its diagnostic excellence.



Skill development training programme on livestock and poultry production along with their scientific management under ARYA project



ICAR-Central Institute of Temperate Horticulture, Krishi Vigyan Kendra, Baramulla organized a 5 day (17th–21st September, 2024) skill developmental training programme in livestock and poultry production. The programme aimed to enhance the knowledge and skills of rural youth in scientific livestock and poultry rearing practices under ARYA Project.

The Inaugural function of the training programme was chaired by Director and Head (Fruit and Vegetable Sciences), ICAR-CITH Srinagar.

Dr M. K. Verma, Director, ICAR CITH, Srinagar, urged the need to take up entrepreneurship in livestock and poultry rearing.

The programme consisted of about 10 training sessions covering, dairy farming, breed selection, nutrition,

health management, housing management, small ruminant production, poultry production, hatchery management, integrated farming, fodder production, waste

management, fisheries sector and marketing.

About 50 participants attended the training programme .



(Source: ICAR- Krishi Vigyan Kendra, Baramulla, Jammu & Kashmir)

Anpario Strengthens Portfolio with Bio-Vet Acquisition, Targeting Dairy Market Expansion



Anpario Inc., a wholly owned subsidiary of Anpario plc, has completed the acquisition of Bio-Vet Inc., a leading producer of animal health and nutrition products. Bio-Vet, based in Barneveld, Wisconsin, is known for its innovative solutions that focus on supporting the animal's natural body systems to improve health and profitability for farmers. The company achieved sales of \$8.2 million for the year ending 31 December 2023 and became a wholly owned subsidiary with over 30 employees, customers, and suppliers.

Bio-Vet's development of Capsule-In-A-Capsule™, a unique delivery system for direct fed microbials (DFMs) and nutritional combination products, established the company as a pioneer in the animal health industry. Their product range has expanded to include capsules, boluses, pastes, soluble powders, electrolytes, and daily fed additives. Anpario is renowned for delivering value-added solutions that offer

improved profitability and performance for its customers through leading product brands such as Orego-Stim®, Optomega®, and Anpro®.

The acquisition combines Anpario's global network and expertise in natural feed additive technologies with Bio-Vet's pioneering knowledge of direct-fed microbial

solutions and market experience in the ruminant sector within the US. Both teams include nutrition, veterinarian, and animal production professionals, seeking to further advance existing solutions through a combination of research and industry-led initiatives.

Anpario's production facility in Wisconsin will provide Anpario with the ideal platform from which to drive its ambitions in the Americas region. The plant production capability and focus on high-quality standards complement Anpario's own Manton Wood, UK operation, and both facilities are part of Anpario's strategic plans going forward.

Consumer preferences for natural food production and consumption of animal-based products are growing, and global sustainability trends are creating the need for higher farm productivity, reduced emissions, and a shift away from antibiotic growth promoters and other outmoded technologies used

in feed. The combined portfolio of specialized feed additives including phytochemicals and direct-fed microbials ensures Anpario is strongly positioned to help customers adapt and deliver improved animal productivity.

Anpario and Bio-Vet will now use their united skill set to deliver scientifically driven, sustainable solutions that focus on animal health, feed efficiency, and performance. The combined knowledge in the team will accelerate the development of next-generation solutions and strengthen Anpario's ability to better serve customers worldwide.

Merck Animal Health Announces EMA Approval for BOVILIS® ROTAVEC® CORONA



Merck Animal Health announced the approval of BOVILIS® ROTAVEC® CORONA by the European Medicines Agency. This vaccine is designed for subcutaneous injection in pregnant cows and heifers, aiming to enhance the production of antibodies against E. coli adhesins F5 (K99) and F41, as well as rotavirus and coronavirus. Administering this vaccine to the dam during pregnancy is crucial as it helps to provide passive immunity to the calf, protecting it from diarrhea caused by these pathogens.



The safety and efficacy of BOVILIS ROTAVEC CORONA have been established, allowing it to be administered on the same day and via the same route as BOVILIS® CRYPTIUM®, although they must be given at different sites. This flexibility in administration is significant for farmers and veterinarians as it allows for comprehensive protection against multiple pathogens that cause calf scours, a leading cause of mortality in calves under one month old.

Calf scours, primarily caused by pathogens such as rotavirus, coronavirus, Cryptosporidium, and E. coli, poses a serious threat to young calves, especially in their vulnerable early weeks of life. Factors like nutrition, hygiene, stress, housing, and weather can exacerbate the risk of scours. By vaccinating the dam with both BOVILIS products before calving, the colostrum produced will provide the calf with enhanced protection against these infectious agents.

Merck Animal Health, a division of Merck & Co., Inc., has a long-standing commitment to advancing animal health through innovative research and development. The company emphasizes the

importance of vaccine innovation within its BOVILIS portfolio, as highlighted by Ruud Segers, associate vice president of R&D. Merck Animal Health aims to improve the health and well-being of animals and the people who care for them, offering a wide range of veterinary pharmaceuticals, vaccines, and health management solutions.

With a presence in over 50 countries and products available in approximately 150 markets, Merck Animal Health is dedicated to leveraging cutting-edge science to address the most pressing health challenges in the animal sector. The company's investment in research and development, along with its modern supply chain, underscores its commitment to providing effective health solutions for animals globally. For further information, Merck Animal Health encourages engagement through its website and social media platforms.

IDFA's Women in Dairy Network Wins IDF Dairy

Innovation Award for Women Empowerment



Today, the International Dairy Federation (IDF) presented the IDF Dairy Innovation Award for Innovation in Women Empowerment to the Women in Dairy network of the International Dairy Foods Association (IDFA). The awards honour the dedication of the global dairy industry to innovation by highlighting progressive projects that improve productivity and support the



Sustainable Development Goals (SDGs) of the UN. At the IDF World Dairy Summit, IDFA's senior vice president of trade and labour policy, Becky Rasdall, got the honour.

"IDFA's Women in Dairy network is honoured to receive the 2024 Dairy Innovation Award for Innovation in Women Empowerment, which recognises their efforts to promote gender equality in the U.S. dairy industry," Rasdall stated.

"Encouraging women fosters greater innovation, improves our ability to make decisions, and guarantees the long-term viability of our sector."

Through data-based metrics and tools, C-suite involvement, networking, and professional and leadership development, IDFA's Women in Dairy network seeks to enhance gender equity, recruitment, and retention in the U.S. dairy industry. The network, which now has over 1,100 women and men from all parts of the dairy supply chain, offers industry benchmarking initiatives, in-person events, mentorship circles throughout the year, and monthly educational and networking activities.

Catered leadership development opportunities via its Women's Summit are among the most recent options that IDFA has made accessible to women. More than fifty women from the dairy business came together for the first conference to network, lobby on Capitol Hill, gain important leadership skills, and hear from accomplished and driven women from a variety of fields about their experiences as leaders and women. The next IDFA event is scheduled for March 10–12, 2025, and the organisation is thrilled to continue this opportunity every year.

Additionally, encouraging executive-level discussions, supporting policies that better support, recruit, retain,

and develop women in the business, and assessing industry-wide progress on gender equality have all been top priorities for IDFA. The inaugural State of Women in Dairy Report, published by IDFA in early 2024, examined the attitudes, beliefs, behaviours, and policies that impact women working in the dairy supply chain as well as related sectors. The second edition of IDFA's State of Women in Dairy study, which will be used to monitor the dairy industry's ongoing advancements in gender equality, was just issued. You can see the poll and further details on the Women in Dairy network's current programs here.

The 2024 IDF Women in Dairy Report recently highlighted IDFA's Women in Dairy network, highlighting the significance of the network's networking, training, and programming as a means of advancing gender equality.

New Zealand Escalates Dairy Trade Dispute with Canada Over CPTPP Violations



The government of New Zealand said Friday that it has intensified its



long-running trade dispute with Canada over the latter's ability to import its dairy goods into the North American nation.

The government of New Zealand has informed the Canadian government and other parties to the Comprehensive and Progressive deal for Trans-Pacific Partnership (CPTPP) trade deal that it has initiated obligatory discussions in the dairy dispute with Canada, according to New Zealand Trade Minister Todd McClay.

These now have to start in 15 days. In May 2022, New Zealand filed a lawsuit against Canada, claiming that Ottawa had violated the terms of the trade agreement by imposing dairy tariff rate caps. New Zealand specifically alleges that although Canada consented to provide certain foreign companies access to the dairy market under a tariff-rate quota system, it was really giving some of them to local companies in an unlawful manner.

"As a matter of principle, the New Zealand Government expects our

trade partners to treat our exporters fairly and within the rules of our agreements," McClay said in a statement.

"Canada is not doing that in respect to the dairy quotas that were negotiated and agreed with New Zealand," he said.

Australia, Japan, Mexico, Peru, and Singapore are among the five other CPTPP countries that have joined New Zealand in the dispute. In September 2023, both Canada and New Zealand said that an arbitration panel had ruled in their favour.

A request for comment was not immediately answered by Canada's High Commission in Wellington.

Canada failed to comply with the findings within a reasonable timeframe, according to New Zealand's statement on Friday.

According to the New Zealand government, this is the first dispute that any party has brought under the CPTPP and the first dispute that New Zealand has brought under a free trade agreement.

Belgium Announces Compulsory

Bluetongue and EHD Vaccinations for Farmers Starting 2025

bluetongue virus, namely serotype 3, which originated in the Netherlands, caused large losses for Belgian farmers. Compared to earlier strains, this one is thought to be more aggressive.



Belgian sheep and cattle producers will have to vaccinate their animals against serotypes and viral strains of bluetongue starting in 2025. This declaration was made on Wednesday by departing Agriculture Minister David Clarinval, who also said that cattle would also need to get an epizootic hemorrhagic disease (EHD) vaccination.

This year, an epidemic of the

Although a vaccination for this serotype is available, it has only been made available voluntarily so far. According to Clarinval, "After several months of the epidemic, we have to conclude that voluntary vaccination has not sufficiently limited the impact of the disease." The administration is acting more forcefully since there is still a considerable chance of a revival.

After speaking with a number of



agricultural groups, Clarinval determined that in 2025, vaccination will be required for farmers raising sheep and cattle. This covers immunisation against serotypes 3 and 8, which were the causes of the pandemic this year. Cattle also need to be protected against EHD, a virus that recently spread from France.

Farmers will have to pay for the vaccines, but they will have less financial responsibility the next year since they won't have to contribute to the health fund, which is meant to help farmers who raise sheep, goats and deer.

Modern Twist to Tradition: Amul Begins Mass Production of 'Mahaprasad' at Kashi Vishwanath Temple

The "mahaprasad" served to worshippers at the famous Kashi Vishwanath temple in the Prime Minister's Lok Sabha constituency of Varanasi underwent a significant change after the controversy over the "laddus" presented at the Tirupati temple.

At its recently constructed Banas Kashi Complex in Varanasi, Gujarat-based Banas Dairy, a member union of the Gujarat Cooperative Milk Marketing Federation (GCMMF) that sells dairy products under the Amul brand, began producing "mahaprasad" for the temple.

The responsibility of selling the "mahaprasad" of the "tandul laddus" at the temple's prasad kiosk has also been given to Amul.

Additionally, Banas Dairy's Varanasi business created a standard operating procedure (SOP) for preparing the "mahaprasad," which is served to the hundreds of pilgrims who attend the temple each day.

Jayan Mehta, managing director of GCMMF, said, "This is the first time that the Shri Kashi Vishwanath temple trust prepared a special recipe of the 'tandul laddus' which was provided to us to prepare the 'mahaprasad'."

Up until recently, the "mahaprasad"

was composed of dried fruits and laddus baked with wheat flour. The use of "belpatra," also known as bel or bilva leaves, which are revered and presented on the statue of Lord Shiva at the Kashi temple, one of the 12 Jyotirlingas, the holiest of Shiva temples, is what makes this new "mahaprasad," or the tandul laddus, unique.

Amul first began offering the "mahaprasad" for sale at the temple kiosk. The company can produce 20 tonnes of "mahaprasad" every day, he said, adding that "we have enough manufacturing capacity to meet the future demand to cater to devotees both within Varanasi and across the country." The temple trust signed a contract with Banas Dairy and GCMMF to prepare the SOP and manufacture the "mahaprasad" laddus.

In our Varanasi confectionery, we have a line specifically designed to produce these laddus. At every step, we strive to guarantee the purity of the "mahaprasad," said Jayan Mehta, MD of GCMMF.

The Banas Kashi Complex in Varanasi will process the bel leaves in accordance with the SOP created



by Banas Dairy and Amul. The whole prasad-making procedure will take place in a spiritual setting with traditional puja and recitations. CCTV monitoring will be in place around-the-clock, and the backgrounds of those working on the prasad-making process will be checked.

Rice flour, ghee, cashew (6%), almond (5%), clove (0.7%), cardamom (0.7%), sugar syrup, and a 0.7% bel leaf extract are the ingredients of the mahaprasad "tandul laddus." Every component used to make the laddus, including the rice flour, sugar, and ghee, complies with the regulations set out by the statutory food regulator, the Food Safety and Standards Authority of India (FSSAI). In order to preserve the quality of the prasad, the shelf life of the packed laddus has also been increased using changed environment packing.

On February 23 of this year, Prime Minister Narendra Modi officially opened the Banas Kashi Sankul milk processing facility at UPSIDA Agro Park, Karkhiyaon. The PM had emphasised at the opening that the factory would be crucial to bringing Banaras sweets to every region of India.

Following the opening, the Banas Dairy's Kashi Sankul began producing and distributing two well-known treats, the Banarasi "lal peda" and "launglata," which are sold under the Amul brand.

Traditionally produced on a small scale by local confectioners, lal peda is one of Banaras' most well-known treats and is dedicated to Lord Shiva at the Kashi temple. At its peda production line, which can produce 1.5 tonnes per day (45 tonnes per month), the Banas Kashi Sankul began producing this treat.

Bengaluru-Based Stellapps Secures \$26M Funding, Eyes West Asia Expansion

Stellapps Technologies, a Bengaluru-based dairy technology startup, has successfully raised \$26 million in a Series C funding round, marking its latest step towards expanding its mooMark business. This funding round, comprising both equity and debt, saw participation from a range of existing and new investors. Notable participants included Blume Ventures, Omnivore, the Bill & Melinda Gates Foundation, IDH Farmfit Fund, 500 Global (formerly 500 Startups), Singapore-based Blue Ashva Capital, and new investor Miledeep Capital. Additionally, the U.S. International Development Finance Corporation (DFC) provided debt funding to support the firm's growth.

Founded in 2011 by Ranjith Mukundan, Ravishankar G Shiroor, Praveen Nale, Ramakrishna Adukuri, and Venkatesh Seshasayee, Stellapps began as a Dairy Internet of Things (IoT)

solutions provider but has since expanded its offerings. Today, it is a major player in contract manufacturing and private labeling of value-added dairy products under the mooMark brand. The company's mission is to digitize and enhance the dairy supply chain, ensuring higher productivity, superior quality, and full traceability, from farm to consumer.

The mooMark business, the focal point of the latest funding round, deals with contract manufacturing and private-label dairy operations. Stellapps aims to develop high-quality, traceable, and sustainable dairy products through this venture. According to Stellapps' CEO, Ranjith Mukundan, the newly raised capital will be primarily used to expand the mooMark business across India and strengthen its export capabilities, beginning with West Asia. Mukundan emphasized the significance of mooMark's value-added dairy products in Stellapps' future, highlighting that they align with the company's broader goal of turning India into a global protein hub.

Stellapps has carved a niche in the dairy industry by leveraging a low-capex, tech-powered approach. Its sophisticated technology stack



enables seamless traceability and sustainability across the dairy supply chain. This not only helps reduce the carbon footprint at the farm level but also ensures that mooMark products are fully traceable, making them ideal for FMCG, D2C (direct-to-consumer), and HoReCa (hotels, restaurants, and cafés) businesses, many of which are focused on meeting net-zero goals.

The company operates in over 42,000 villages across India and facilitates the movement of more than 14 million liters of milk each day. Its technology impacts over 3.5 million farmers, improving their livelihoods by providing them with better tools and access to larger markets. Stellapps has a growing clientele of around 150 businesses, including prominent names like Unilever, FreshToHome, Punjab Paneer, and Namdhari's. By integrating traceability and quality into the supply chain, Stellapps enhances the competitiveness of these companies, especially in the fast-growing market for premium dairy products.

Financially, Stellapps is aiming for growth despite a challenging market. In FY24, the company recorded a revenue of approximately Rs 360 crore and is targeting Rs 400 crore in FY25. The focus for the next financial year will be on improving unit economics and profitability, even if overall revenue remains steady. The firm had previously raised \$18 million in a pre-Series C round in 2021 from investors like Nutreco.

With its new funding, Stellapps is poised to expand its market presence, both domestically and internationally, while continuing to innovate in the dairy tech space. The firm's focus on sustainability, traceability, and farmer-first solutions places it in a strong

position to meet the growing demand for high-quality dairy products in India and beyond.

FSSAI Issues Updated SOPs for Safe Milk Production Amid Rising Adulteration Cases



To prevent milk contamination and adulteration, the food regulator has released standard operating procedures for primary milk producers, including small dairy units that are not a member of dairy cooperative organisations.

The Food Safety Standard Authority of India (FSSAI) has issued SOPs on milk production, environmental and hygienic standards, and food safety procedures such as milk handling, storage, and transportation. This occurs against the background of a growing number of milk and milk product adulteration instances.

The revised regulations will take effect 60 days from the date of notice on October 3rd, following the receipt of stakeholder proposals.

Primary milk production is the process of producing milk without the use of milking equipment, without chilling the raw milk at the producer's level, or by delivering it to customers in cans.

Clean, well-ventilated cow barns, suitable housing and waste disposal systems, and enough water and feed for cows, buffaloes,

and other dairy animals are all examples of specified procedures.

Local authorities have published standards for the environmental management of dairy farms and gaushala, which dairy businesses are required to adhere to.

According to the draft notice, "undesirable animals" including pigs and poultry that might contaminate milk should not be allowed in milking zones. The milking procedure will be carried out naturally. It is forbidden to use "inhumane practices" such as oxytocin during forced milking. It said that in order to avoid animal infections, proper management practices should be put in place.

"The milk should originate from animals free from systemic diseases whose causative agents such as Mycobacterium tuberculosis, Coxiella burnetti, Brucella abortus, can be transmitted to man through milk. The animals should also be free from bacterial diseases such as salmonellosis, anthrax, shigellosis, enteropathogenic E.Coli, Streptococcus and viral infections such as vaccinia, pseudo cowpox, louping ill (Tick borne encephalitis), food & mouth diseases etc. Milk should be drawn from animals that do not show visible impairment of the general state of health and which are not suffering from any infection of the genital tract with discharge, enteritis with diarrhoea and fever, or recognizable inflammation of the udder," said the notification dated 3 October.

Milk from such dairies should be delivered to customers within three to four hours after being milked; if not, it must be transported to a processing facility within four hours or kept in appropriate refrigeration between four and six degrees Celsius.

'Target to bring 8 crore Dairy Farmers Under Cooperative Fold to Ensure Unadulterated Milk': Amit Shah



Union Home and Cooperation Minister Amit Shah stated on Monday that a comprehensive plan for White Revolution 2.0 has been "readied" to bring all 8 crore milk-producing farmers in the nation under the control of the cooperative National Dairy Development Board (NDDB), with an emphasis on "providing unadulterated milk" to citizens.

Shah was in Anand to attend the Diamond Jubilee celebrations of NDDB and the anniversary of Tribhuvandas Patel's birth. Patel founded the Kaira District Co-operative Milk Producers' Union Limited, often known as "Amul," and is credited with founding the Indian cooperative movement.

Shah also credited Late Lal Bahadur Shastri, the "hard-working" prime minister, for establishing the NDDB in order to "replicate the success of

Amul across the country."

He went on to say that the cooperative's Amul brand has achieved a remarkable "number one world ranking." "A cooperative faces fierce competition from companies when it comes to product marketing. As part of White Revolution 2.0, we want to

bring the other six crore farmers into the cooperative, which is crucial for supplying people with clean milk. Currently, 1.5 crore of India's eight crore milk producers are directly affiliated with the cooperative.

"Today, we must realise that had Polson Dairy not treated the milk farmers unfairly and exploited them by refusing to purchase milk and not paying just remuneration, Tribhuvandas Patel would have never had the opportunity to establish the cooperative," Shah said, referring to Patel as a "unsung hero." Because to his efforts, the nation's five crore milk producers enjoy a wealthy and sustainable way of life.

According to the Home Minister, Lal Bahadur Shastri made sure that "mothers do not feed milk adulterated with urea" to their

children by establishing the NDDB. "Neither Shastri nor Patel realised that the seed would grow into such a massive tree, which is the most successful and professional cooperative," Shah remarked.

Shah said that NDDB's "no owner" was the single factor that allowed them to provide customers pure milk. "Amul's trust is that the milk is not mixed with urea and that it has also improved children's health," Shah said. Because the NDDB does not have an owner who considers his personal interests, its milk is pure.

In addition to attending the event, Union Minister of Fisheries, Animal Husbandry & Dairying and Panchayati Raj Rajiv Ranjan Singh underlined the problem of "adulterated milk products" and said that the cooperative sector aids in addressing it. According to Ranjan, there is a lot of adulteration in milk these days, which is causing health problems. Every day, around eight to ten individuals come to us with cancer. The primary cause of it is tainted milk and food. The majority of sweetmeat businesses purchase milk products from unorganised milk producers who combine urea, adulterate goods, and even inject animals to produce more milk. Eating unbranded paneer in New Delhi is certain to result in health problems the same evening.

Along with other projects like Mother Dairy's Fruit and Vegetable Processing Plant in Itola, Vadodara, and IDMC Ltd's Polyfilm Plant in Narela, Delhi, Shah also laid the foundation stone for a new NDDB office building and introduced the Gir Ghee from Mother Dairy and the Badri Ghee from Uttarakhand Cooperative Dairy Federation.

The NDDB signed a number of memorandums of understanding,

including one with the Indian Institute of Science (IISc) to carry out innovative One-Health research with an emphasis on sustainability and animal health. An MOU between NDDDB and the Space Applications Centre (SAC) of ISRO for remote sensing technology to assess fodder resources; a partnership between NDDDB, Suzuki R&D Centre India (SRDI), and Amul/Mehsana Milk Union to establish a compressed biogas plant, enhancing sustainable energy production; and a partnership between National Cooperative Organics Limited, Mother Dairy, and NDDDB Mrida Limited to promote organic farming practices.

Aavin to Launch 'Green Magic Plus' Amid Rising Costs, Faces Criticism of Stealth Price Increase



Aavin is proposing to introduce a new milk variety called "Green Magic Plus" at a price of Rs 25 per 450 ml (Rs 50 per 900 ml) in an effort to fraudulently raise prices. The nutritional value of the new variety is identical to that of its

standardised version, Green Magic, with vitamins A and B added during testing. Around five lakh gallons of the 14.5 lakh litres of milk that are delivered everyday in Chennai are made from The Green Magic, which costs Rs 44 per litre and has 4.5% fat and 9% SNF.

By selling milk at heavily reduced prices, the initiative seeks to avoid losses. Green Magic costs Aavin between Rs 4 and Rs 5 a litre. On the other hand, private brands charge between Rs 54 and Rs 58 per litre for standardised milk.

In a recent correspondence, a senior representative from Aavin's marketing division asked the Tiruchy District Cooperative Milk Producers' Union to produce 20,000 litres of the novel variety at the Perambalur district's Padalur dairy. Although Aavin officials insist that the plan has not yet been put into action, the action seems to be another tactic to raise prices by decreasing supply.

"Delite," which contains 3.5% fat but costs Rs 44 per litre, was

released by Aavin last year. According to industry experts, Chennai's strong demand for Green Magic is what led Aavin to make this choice. In response to criticism, Aavin's November 2023 proposal to stop Green Magic was shelved.

Aavin buys buffalo milk for Rs 47 per litre and cow milk for Rs 38 per litre. 26–27 lakh litres of the 36 lakh litres of milk that Aavin purchases per day are sold in sachets, with the remainder being turned into dairy products. The manufacturing cost increases to Rs 49–Rs 51 per litre because Aavin must pay for butter or use its own in order to fulfil FSSAI regulations since the milk has a low fat content.

Amul Partners with Costco to Bring Indian Dairy Staples to U.S. Shoppers

The "Taste of India" will be accessible in the US six months after it first left India, as dairy behemoth Amul has made its way into the country's mainstream retail sector. The Gujarat Cooperative Milk Marketing Federation (GCMMF), which sells dairy goods under the Amul brand, has partnered with Costco, a major chain store located in the US, to provide Amul fresh milk to American customers and the Indian diaspora.

Amul Gold made its debut in the US retail market on Tuesday when gallon packs (3.78 litres apiece) were put on Costco Wholesale's shelves. "We are proud to have made our debut in mainstream retail in the United States," said Jayen Mehta, managing director of GCMMF, the Gujarati co-operative milk unions' apex organisation.

It's interesting to note that Costco offers Kirkland Signature, its own brand of milk. "We introduced Amul fresh milk in May, and it quickly gained popularity. Our special 6% fat formulation of Amul

Gold has drawn in both American and Indian diaspora customers." All of the major grocery shops and supermarket companies that cater to the Indian diaspora now carry it. Mehta said, "We have strategically launched Amul products to make them widely available across the US market, given that Costco is one of the largest retail chains."

Amul began supplying its Amul Gold packets to east coast Costco shops. It will eventually be implemented at each of the worldwide retailer's roughly 750 locations.

In order to meet the Indian diaspora's increasing demand, India's biggest milk cooperative will also provide other dairy products in the US, including curd, buttermilk, and fresh cream.

In its first move outside of India, the dairy behemoth joined up with Michigan Milk Producers Association (MMPA), the country's tenth-largest dairy cooperative, to enter the US market earlier this year. In keeping with the brand's connections to Michigan, Amul, the biggest farmer-owned cooperative in the world, partnered with the 108-year-old MMPA.

The founder and chairman of GCMMF, Dr. Verghese Kurien, a Michigan State University alumni who is hailed as India's Milkman and is credited with bringing about the White Revolution in the nation. In collaboration with MMPA, Amul introduced a line of fresh milk with the same content and brand that is well-liked in India.

In the US, Amul has started producing fresh milk products utilising MMPA's cutting-edge technology. MMPA is a cooperative owned by dairy farmers that was founded in 1916 and serves members in Michigan, Ohio, Indiana, and Wisconsin. Its four processing facilities include two dairy ingredient

factories in Michigan, a dairy products factory in Ohio, and a cheese plant in Indiana.

Gujarat's White Revolution: Four more Dairy Cooperatives Follow AMUL to Join the Billion-Dollar Club

With a revenue of Rs 5,255 crore in 2008, the Gujarat Co-operative Milk Marketing Federation (GCMMF), which sells the domestic dairy brand Amul, achieved the distinction of becoming India's first billion-dollar milk cooperative. Five billion-dollar milk cooperatives may be found in Gujarat, the birthplace of the White Revolution, ten and a half years later.

In the fiscal year 2023–2024, GCMMF, the biggest food product marketing organisation in India, achieved an incredible revenue of Rs 59,545 crore (\$7 billion). Banas Dairy, situated in Palan Pur; Amul Dairy, based in Anand; and Sabar Dairy, based in Himmatnagar, are the three other GCMMF member unions that have reached the billion-dollar club. With a revenue of Rs 19,003 crore, Banas Dairy is a US \$2.3 billion company.

With a revenue of Rs 12,911 crore, Amul Dairy, the oldest milk cooperative in India and the owner of the Amul brand, grew to a \$1.5 billion cooperative. In contrast, Sabar Dairy had a revenue of Rs 8,939 crore, earning a spot in the exclusive club of companies with a \$1.1 billion turnover. With a sales of Rs 12,969 crore, Gandhinagar-based AmulFed Dairy, a division of GCMMF, also became a \$1.5 billion

milk cooperative.

Furthermore, the Sagar brand's owner, Dudhsagar Dairy, situated in Mehsana, is close there. With a revenue of Rs 7,494 crore in the fiscal year 2023–2024, Mehsana Dairy became a US \$0.9 billion company.

Given that Gujarat has never been the leading milk-producing state in India, these startling turnovers are significant. They are evidence of the dairy cooperatives' ongoing efforts to increase their capacity for processing milk, create value-added products, and guarantee the maximum possible compensation for the farmers who produce the milk.

Jayen Mehta, managing director of GCMMF, credits this increase to an emphasis on diversity and growth. In addition to strengthening the cooperative network within and outside of Gujarat, he said that all of our member unions had concentrated on growth, improved their capacity to process milk and milk products, and launched value-added goods.

The Amul brand's group turnover increased from Rs 72,000 crore (\$9 billion) in the fiscal year 2022–2023 to Rs 80,000 crore (\$10 billion) in 2023–2024.

According to the International Farm Comparison Network (IFCN), the federation is the largest farmer-owned dairy cooperative in the world, with a network of 36 lakh farmers spread across 18,600 villages in Gujarat and 18 member unions that purchase 300 lakh litres of milk daily. It is ranked eighth out of the top 20 dairy companies worldwide in terms of milk processing. The Gujarati milk unions together own more than 100 dairy processing facilities around the nation.

CM Yogi Adityanath Approves ₹75 Crore for Phase 2 of Nand Baba Milk Mission

Nandini Krishak program, with a total entitlement of Rs 10.15 crore.

With a budget of Rs 72 crore, 330 first milk cooperative organisations are also intended to be formed. In



The second stage of the Nand Baba Milk Mission, which aims to raise the revenue of cow owners in the state, has received approval from Chief Minister Yogi Adityanath. Additionally, the program supports native cow breeds with the goal of empowering them to become self-sufficient and autonomous. More than 10,000 cattle owners in the state will profit from the approximately Rs 75 crore the Yogi administration would invest under the initiative during the 2024–25 fiscal year.

Rs 2.05 crore from the overall budget would be used to help 2,566 recipients via the indigenous cow promotion program, Swadeshi Gau Sanvardhan. In the same way, the Pashupalak Protsahan initiative, which has a fund of Rs 8 crore set up for the welfare of 7,028 people, would reward forward-thinking dairy producers. 90 cattle farmers would also get benefits under the

addition, 1,447 dairy operators would get skill enhancement training to boost milk output in the state, and 621 testing kits for checking animal health and milk quality would be given to dairy farmers.

200 persons will get benefits under the National Gokul Mission's ABIP-IBF ETT scheme (Breed Improvement Programme), and the subsidy amount will be disbursed after the review of their documentation. The establishment of a webpage for the Nand Baba Milk Mission would cost Rs 60 lakh in the interim. Funds have also been set aside for the establishment of the District and State Program Management Units.

By modernising the facility at Rehmankheda, Lucknow, a laboratory will also be constructed to further improve the program for producing sexed sorted semen for bovines.

Parag Milk Foods Sets Ambitious Whey Protein Growth Plans with ₹300 Crore Facility Expansion



Parag Milk Foods is aggressively expanding its presence in the whey protein market, targeting a 20-25% market share by FY28. With a ₹300 crore investment in a Pune-based facility, the company is leveraging the growing demand from youth and fitness enthusiasts. This strategic investment will allow Parag Milk Foods to scale up production and meet the increasing demand in the whey protein segment, which is expected to grow at a 30-35% CAGR.

Currently, whey protein contributes 7% to the company's overall revenue, and Parag aims to increase this share to 15% over the next 3-4 years, according to Executive Director Akshali Shah. The company is also adopting an omnichannel distribution strategy, selling through e-commerce, modern trade outlets, and specialized protein stores, with about one-third of sales already coming from online platforms.

Additionally, Parag Milk Foods has made key top-level hires, including former executives from Amul, Lactalis India, and Reliance Brands, positioning itself for further growth. The company's whey protein brand, Avvatar, will benefit from a robust marketing and distribution strategy, as well as its established presence in international markets, including the USA, China, and Australia.

Parag Milk Foods' shares have gained over 120% in the past year, reflecting investor confidence in its growth strategy.

Maharashtra Govt Announces ₹1,500 Monthly Aid Per Cow for State's Gaushalas

According to Chief Minister Eknath Shinde, the Gaushalas program will guarantee the survival of native cow breeds. Given the "meagre income" of cow shelters, the state administration said that the gaushala subsidy would "strengthen them financially." It said that the Maharashtra Goseva Commission would carry out the project online.

The state's native cow breeds have been granted the title of "Rajyamata-Gomata," or mother of the state, according to the administration. It said that the number of native cows was 46,13,632 according to the 20th animal census, which was carried out in 2019 and represented a 20% decrease from the 19th census.

Following media reports over the weekend that the state's finance

The governments of Rajasthan, Haryana, Uttar Pradesh, and Madhya Pradesh have previously announced subsidies for Gaushalas, therefore Maharashtra is not the first state to do so. Gaushalas operated by non-governmental organisations in Madhya Pradesh get help of Rs 20 per cow per day. The Haryana government had said in August that gaushalas will get payments of Rs 20 per day for calves and Rs 30 per day for cows. The Uttar Pradesh government allocated Rs 125 crores in 2023 to construct livestock shelters. According to the statement, the money will be given at a rate of Rs 50 per cow. For cattle residing in cow shelters, the Rajasthani government offers financial aid of between Rs 20 and Rs 40 each animal.

Himachal Farmers to Receive ₹33,000 Grant for Cows, ₹8,000 for Cowshed Flooring

According to an ATMA official, farmers engaged in natural farming in Himachal Pradesh would get a grant of Rs 33,000 to purchase a cow and an additional Rs 8,000 to pave the cowshed floor. "The state's natural farmers will receive a grant of Rs 33,000 to purchase a local cow in addition to a subsidy of Rs 8,000 to pave the cowshed's floor," Neha Bhardwaj, Assistant Technical Manager of the Agricultural Technology Management Agency (ATMA), announced at a function in Manjhiar village.

Bhardwaj spoke during a public awareness and sensitisation workshop on natural farming in Manjhiar, where he advised against



The Maharashtra government approved a subsidy plan that will provide Rs 50 per cow per day to the state's gaushalas, or cow shelters. Each cow would get Rs 1,500 per month as a result. This is the same amount that the Maharashtra government gives to women between the ages of 21 and 65 whose family earns less than Rs 2.5 lakh a year under the Ladki Bahin Yojana.

department had warned that it faced "financial pressure" as a result of revenue shortages and new projects, the Maharashtra administration made its declaration. The finance department thus said that it would not be able to take on further obligations. The state government approved this proposal in spite of the finance department's reservations.



using toxic pesticides and chemical fertilisers.

Naturally grown crops are less expensive to produce and safer for your health. According to her, farmers that embrace this agricultural style may boost their revenue while also protecting the environment.

According to her, natural farming's primary ingredients, such as Jeevamrit, Beejamrit, Dhanjeevamrit, and indigenous insecticides, may be made at home using the urine and dung of native cows.

She also discussed the Rajiv Gandhi StartUp Yojana and provided information on regional cow breeds, including Sahiwal, Red Sindhi, Rathi, Thar, and Parker. Additionally, pea seeds were given to the camp's farmers.

Center-Backed Program Deploys Over 500 Mobile Vet Units for Cattle in Uttar Pradesh

Over 500 mobile veterinary care units were assigned across Uttar Pradesh to respond to cattle-related SOS and emergency calls. To evaluate the situation on the ground, a group of top officials from the Center's dairying and animal husbandry department travelled to the city.

To serve the 5.2 crore cows in Uttar Pradesh, 520 mobile veterinary units were gradually given to the state

under the ESVHD (Establishment and Strengthening of Veterinary Hospitals and Dispensaries) program.

The plan is to assign one mobile unit to handle regular care and emergency calls for one

lakh cattle.

89 lakh cows and 1.53 crore buffaloes are in-milk, while the remaining 3.3 crore buffaloes and 1.9 crore cows in Uttar Pradesh are dry.

The ESVHD program, which seeks to increase the production of native cows and buffaloes, requires the state to provide the remaining 40% of the funding, with the central government giving 60% of the total.

The team recommended assigning more staff to run the 1962 hotline in order to manage the higher call demand at the Monday morning discussion with the department's chief secretary.

Additionally, it was discovered that each mobile unit receives eight to ten calls on average each day. A senior official in the department of animal husbandry said, "In comparison, the daily average call volume is on the higher side in other states such as Rajasthan, Madhya Pradesh, and Gujarat."

Over the course of the following three days, the Delhi team will go to Raebareli, Meerut, Barabanki, and Unnao to assess the volunteers' response times to calls from farmers and cattle owners seeking care for their animals.

The transportable devices will be modified in the next months to perform artificial insemination on the cattle.

In order to improve the mobile unit's reaction to illness complaints, accidents, and mishaps involving stray animals under the jurisdiction

of urban local bodies, a team from the state's urban development department will also examine how the unit operates.

Punjab Government Initiates Cattle Vaccination Campaign Against Foot-and-Mouth Disease

A vaccination campaign will be started by the Punjabi government to protect cattle against foot-and-mouth disease. According to an official, starting on October 21, the vaccination would be given out for free to all of the state's cattle population.

A total of 816 teams have been established to guarantee the immunisation campaign is implemented smoothly. The minister of animal husbandry, Gurmeet Singh Khudian, said that 6,547,800 doses of the vaccination had been dispersed among the regions.

In addition to stressing the need of keeping a cold chain and informing livestock producers about the advantages of the campaign, he instructed the authorities to finish the vaccination by the end of November.

According to Rahul Bhandari, the department's principal secretary, the focal official for the initiative would be the joint director of NRDDL (Jalandhar). A state-level control room and district-level control rooms have been established by the animal husbandry department at the deputy directors' offices. Additionally, he said, a hotline (0172-5086064) has been established to support cattle producers.

Editorial Calendar 2024

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

Subscription Rates

Time Period

1 Year	INR 2400	USD 250
3 Year	INR 6500	USD 650
5 Year	INR 10000	USD 1000

*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
or visit our website www.irides.in

INTERNATIONAL EXHIBITION ON DAIRY SECTOR



THE Dairy EXPO

28-29-30 AUG. 2025
India Expo Center & Mart,
Greater Noida, Delhi - NCR,
India

Event Highlights



200+
Exhibitors / Sponsors



20+
Countries



200+
VIP Attendees



Extensive Media Coverage



8000+
Visitors

Event by



Concurrent Events



Supported by



Media Partner



+91-741-999-3001 | 999-170-8200 | info@thedairyexpo.in | www.thedairyexpo.in