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BEST ACHIEVERS
FEBRUARY-2026

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Northern Region

COMPANY: IB Group
FARMER NAME: Mr. Achhe Lal

FEBRUARY-2026	Top #1
Farm Type	Open House
State	UTTAR PRADESH
Chicks Placed	3183
Mean Age	40.0
Avg Body Wt	3269
FCR	1.450
cFCR	1.168
Livability%	92.4
Daily Gain	81.7
EPEF	521.0

Eastern Region

COMPANY: IB Group
FARMER NAME: Mr. Ramanand Hait

FEBRUARY-2026	Top #1
Farm Type	Open House
State	BIHAR
Chicks Placed	2232
Mean Age	41.0
Avg Body Wt	3118
FCR	1.416
cFCR	1.168
Livability%	94.4
Daily Gain	76.0
EPEF	506.7

Central Region

COMPANY: IB Group
FARMER NAME: Mr. Arun Chandrakar

FEBRUARY-2026	Top #1
Farm Type	Open House
State	CHHATTISGARH
Chicks Placed	3108
Mean Age	35.0
Avg Body Wt	2504
FCR	1.286
cFCR	1.174
Livability%	94.7
Daily Gain	71.5
EPEF	526.9

South Region

COMPANY: IB Group
FARMER NAME: Mr. Yerragonda Parsharam Reddy

FEBRUARY-2026	Top #1
Farm Type	Open House
State	TELANGANA
Chicks Placed	6150
Mean Age	35.0
Avg Body Wt	2449.0
FCR	1.329
cFCR	1.229
Livability%	89.6
Daily Gain	70.0
EPEF	472.0

FEBRUARY-Top PERFORMANCE BY AREA

Area	Chicks Placed	Mean Age	BW	FCR	cFCR(2Kg)	Livability%	Daygain	EPEF
North EC House	14940	36.0	2720	1.436	1.276	95.5	75.6	502.5
North Open House	6150	35.0	2449	1.329	1.229	89.6	70.0	472.0
East EC House	19768	42.0	2870	1.440	1.247	90.6	68.3	430.0
East Open House	2232	41.0	3118	1.416	1.168	94.4	76.0	506.7
Central EC House	7963	45.0	3786	1.576	1.179	88.6	84.1	473.1
Central Open House	3108	35.0	2504	1.286	1.174	94.7	71.5	526.9
South EC House	14940	36.0	2720	1.436	1.276	95.5	75.6	502.5
South Open House	6150	35.0	2449	1.329	1.229	89.6	70.0	472.0

FEBRUARY-Top 10 FIELD PERFORMANCE

Flock	Farm Type	State	Chicks Placed	Mean Age	BW	FCR	cFCR	Livability%	Day Gain	EPEF
Flock 1	OPEN HOUSE	BIHAR	2232	41.0	3118	1.416	1.168	94.4	76.0	506.7
Flock 2	OPEN HOUSE	UTTAR PRADESH	3183	40.0	3269	1.450	1.168	92.4	81.7	521.0
Flock 3	OPEN HOUSE	PUNJAB	5993	42.0	3415	1.488	1.174	93.6	81.3	511.4
Flock 4	OPEN HOUSE	CHHATTISGARH	3108	35.0	2504	1.286	1.174	94.7	71.5	526.9
Flock 5	EC HOUSE	MAHARASHTRA	7963	45.0	3786	1.576	1.179	88.6	84.1	473.1
Flock 6	OPEN HOUSE	UTTARAKHAND	4280	44.0	3390	1.496	1.187	95.9	77.0	493.9
Flock 7	EC HOUSE	HARYANA	8784	45.0	3513	1.528	1.192	96.7	78.1	494.0
Flock 8	OPEN HOUSE	UTTAR PRADESH	4391	41.0	3301	1.483	1.194	92.7	80.5	503.3
Flock 9	OPEN HOUSE	RAJASTHAN	6788	45.0	3658	1.564	1.196	95.3	81.3	495.4
Flock 10	OPENHOUSE	UTTAR PRADESH	2478	41.0	3291	1.486	1.199	92.1	80.3	497.4

From the Editor's Desk

Global Tensions and Industry Reality

Rising tensions between the **United States** and **Iran** are creating uncertainty in global markets. While there is no full-scale disruption at present, such situations often influence oil prices, transport systems and overall trade movement. For the poultry sector, these changes matter because the industry depends heavily on fuel, feed, and efficient logistics.

The impact so far is indirect, but important. If fuel prices increase, transportation and cold chain costs also rise. Similarly, poultry feed—based on crops like maize and soybean—can become expensive if global input costs go up. Even small increases in these areas can reduce margins for farmers and producers, as poultry is a cost-sensitive business.

India's stable and balanced global approach provides some confidence during such uncertain times. Strong international relations help reduce sudden shocks and support smoother trade conditions. However, the industry still needs to stay alert and prepared for any changes in the global environment.

At the same time, changes are happening within the poultry industry itself. More stakeholders are now preferring platforms that offer real value—such as knowledge sharing, farmer participation, and practical learning. Events that connect directly with farmers, students, and professionals are gaining popularity.

On the other hand, concerns about high costs, poor service quality, and lack of transparency in some established platforms are becoming more visible. Industry participants are now expecting better accountability and fair value for their investment.

In today's environment, the poultry sector must focus on both external risks and internal improvements. Staying prepared, maintaining transparency, and delivering real value will be key to sustainable growth.

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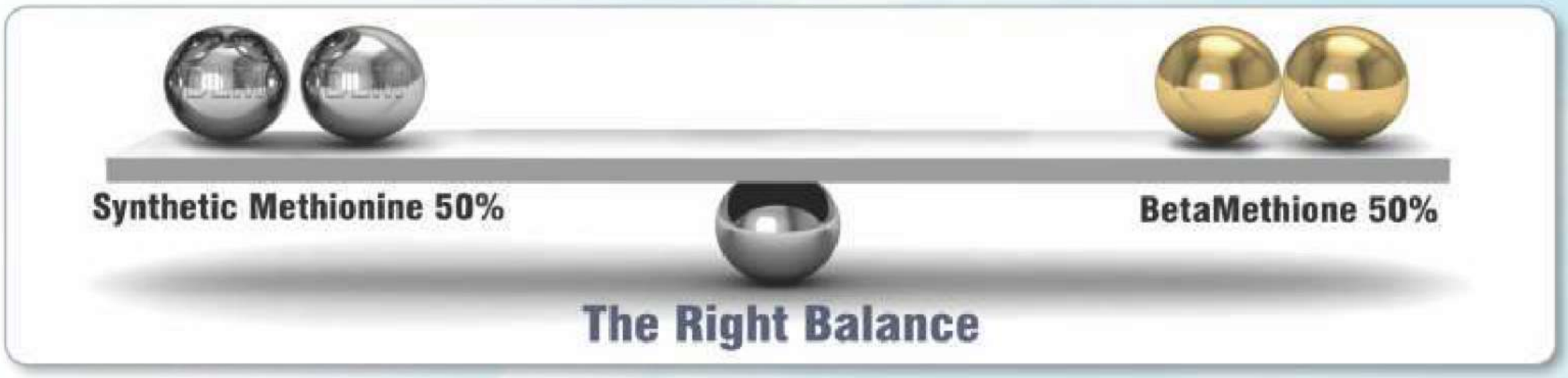

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COMMON STORED GRAIN INSECT PESTS

Er. P. Priyanka,
Faculty, Department of Poultry Nutrition, Suguna Institute of Poultry Management, Udumalpet, Tamil Nadu.

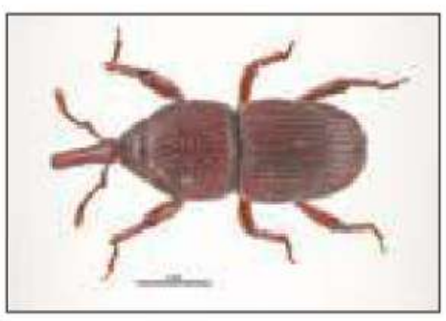
In South Dakota, there are several species of insects that feed on stored grain, resulting in reduced grain quality. In addition, the presence of dead insect bodies can also cause docking when the grain is being marketed. Both the immature and adult stages of stored grain beetles can cause damage to grain, while only the larval stage of the stored grain moths cause damage. These insect pests can be grouped based on whether they are internal feeders or external feeders.

Internal feeders feed within the kernels, while external feeders will consume grain dusts, cracked kernels, and other grain debris. Below are the common internal and external stored grain pests. In addition to these, other species, including the foreign grain beetle and hairy fungus beetle, may be observed in a bin. However, these beetles are feeding on the molds or fungi growing on the grain and not the grain or grain debris.

INTERNAL FEEDERS

Weevils

Of the internal feeders, weevils are generally giventhe most attention, because they are among the most-destructive pests of stored grain. Thelarvae of grain weevils develop within the kernels, and when infested grain is left undisturbedfor long periods of time, they can cause nearly complete destruction. Adult weevils are easilydistinguished from other beetles by their elongated snouts.



Granary Weevil

Maize Weevil

Rice Weevi

Lesser Grain Borer

The lesser grain borer is a pest of a wide variety of grains. The larvae and adultof this pest are damaging. The larvae of this pest are unable to infest undamagedkernels. In addition to kernels, the larvae are also able to develop on grain meal.

Lesser Grain Borer - Profile

Lesser Grain Borer - Feeding

Angoumois Grain Moth

The larvae of the angoumois grain moth are typically nota pest of shelled grain. However, the larvae are a pest of ear corn and can infest the cornbefore it is harvested. The larvae feed inside kernels and cause an unpleasant smell. During warm falls, several generations of the moth can be completed, resulting in significant damage.

Angoumois Grain Moth - Adult

Angoumois Grain Moth - Caterpillar

EXTERNAL FEEDERS

The stored grain pests that are external feeders are present in the grain because grain dusts,cracked kernels, or other grain debris are present and are viable food sources. Similar tointernal feeders, the best management for these insects is prevention. The presence of fungusfeeders indicates that the grain is moldy. Proper aeration and grain cleaning can prevent mostinfestations caused by external feeders.

Beetles

The cadelle beetle, confused flour beetle, flat grain beetle, red flour beetle, and sawtoothed grain beetle are present in the grain due tothe availability of cracked kernels, dust, and other grain debris. In some instances, thesebeetles will feed on kernels that were damaged by internal feeders.

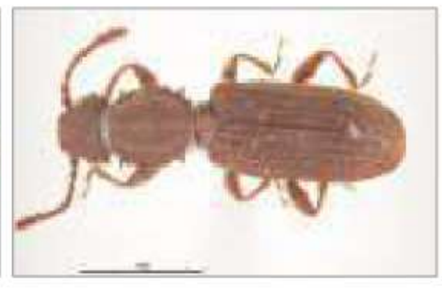
The cadelle beetle, confused flour beetle, flat grain beetle, red flour beetle, and sawtoothed grain beetle are present in the grain due tothe availability of cracked kernels, dust, and other grain debris. In some instances, thesebeetles will feed on kernels that were damaged by internal feeders.

Cadelle Beetle

Confused Flour Beetle

Flat Grain Beetle

Red Flour Beetle



Sawtoothed Grain Beetle

Indian meal Moth

The larvae of the Indian meal moth, caterpillar cause direct damage to the grain by feeding on the seed germ. The larvae of this pest alsoreduce the quality of grain by producing waste and constructing silken webs. These webs areoften observed on the top surface of the grain and can become quite thick.

Indian Meal Moth - Adult

Indian Meal Moth - Caterpillar

SUMMER STRESS MANAGEMENT IN POULTRY PRODUCTION: A STRATEGIC AND SYSTEMATIC APPROACH

By Prof. Dr. ARM Ziaul Hasan, PhD

Senior Consultant – Industrial Agricultural & Livestock Production & Management Specialist

Abstract

Heat stress is not a seasonal inconvenience—it is a predictable, measurable, and economically destructive risk in poultry production systems, especially in tropical and subtropical regions. Every year, producers lose performance, feed efficiency, egg quality, immunity, and ultimately profit, not because heat stress is unavoidable, but because it is poorly managed. This article breaks down the physiology, economic impact, and practical control strategies for summer stress in poultry, focusing on commercial scalability, cost-efficiency, and measurable return on intervention.

The Reality: Heat Stress Is a Management Failure, Not Just Weather

Let's get one thing straight—temperature itself is not your biggest problem. Your inability to control its effects is. Poultry, particularly modern high-producing broilers and layers, are genetically optimized for performance, not resilience. Their metabolic heat production is already high. Add ambient heat, and you're pushing the system beyond biological limits. Thermoneutral zone for poultry:

- Broilers: 18°C – 24°C
- Layers: 20°C – 26°C

Above this range, birds must actively dissipate heat. Once ambient temperature exceeds 30°C, especially with high humidity, heat dissipation becomes inefficient, and stress escalates rapidly.

2. Physiological Mechanisms of Heat Stress

Birds lack sweat glands. Their primary heat dissipation methods are:

- Panting (evaporative cooling)
- Radiation (body heat to environment)
- Conduction (contact with cooler surfaces)

What actually happens under heat stress:

- Increased respiration rate " respiratory alkalosis
- Reduced CO " altered blood pH
- Reduced feed intake " nutrient deficiency
- Increased water intake " electrolyte imbalance
- Oxidative stress " cellular damage
- Suppressed immunity " higher disease risk

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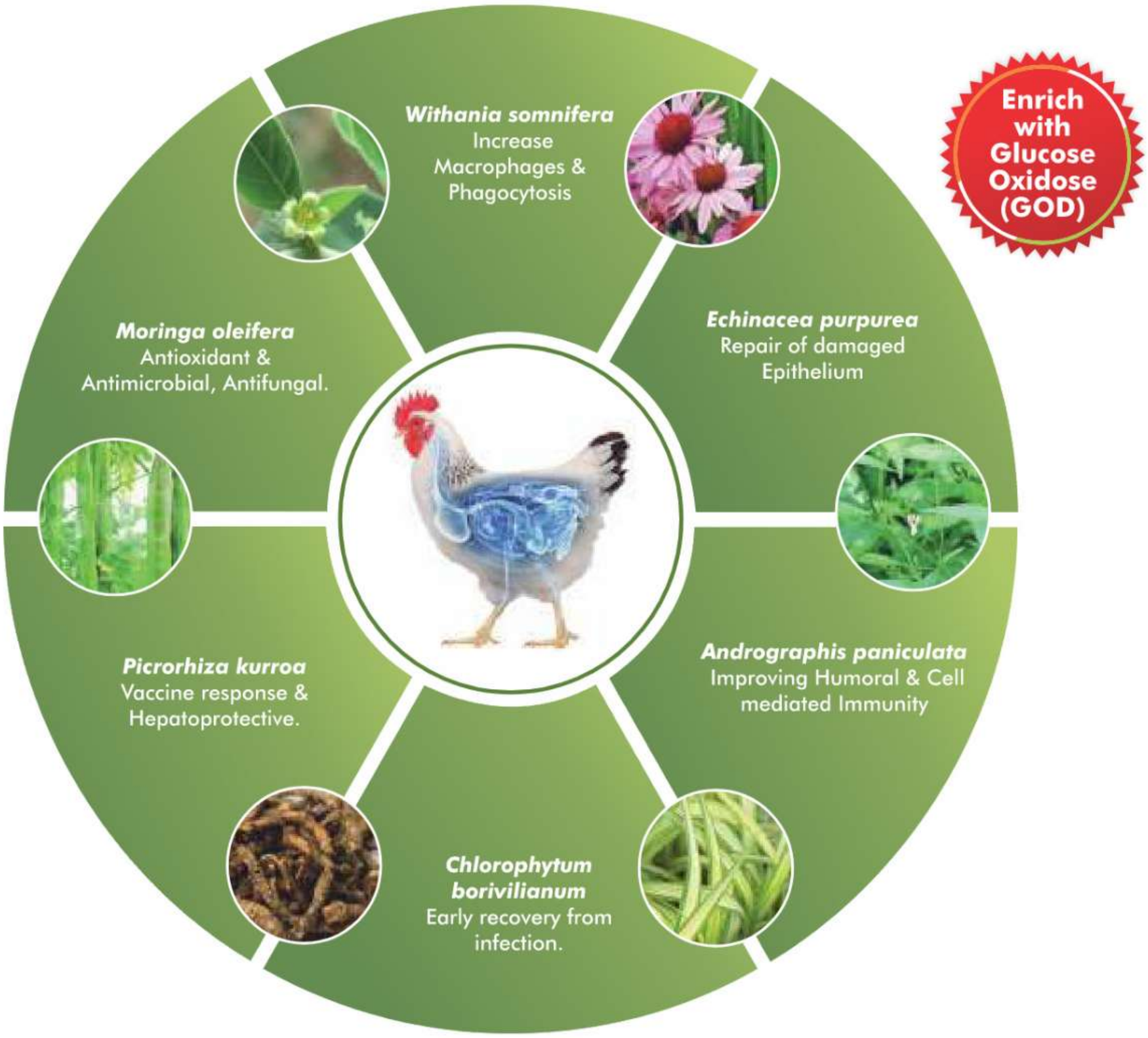

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If you're seeing only reduced feed intake and ignoring systemic physiological disruption, you're missing the bigger problem.

3. Economic Impact: Where You Actually Lose Money

Heat stress silently destroys profitability through multiple channels:

Broilers

- Reduced weight gain (up to 15–25%)
- Poor FCR (increase of 0.2–0.4 points)
- Higher mortality (2–10% depending on severity)
- Increased carcass defects

Layers

- Drop in egg production (5–20%)
- Poor shell quality (thin, brittle shells)
- Reduced egg weight
- Lower hatchability in breeders

Hidden Costs

- Increased medication use
- Reduced vaccine response
- Long-term productivity decline

If you think heat stress only affects feed intake, your financial model is wrong.

4. Environmental Factors That Make It Worse

Heat stress is not just temperature. It's a combination:

- Humidity: High humidity reduces evaporative cooling
- Airflow: Poor ventilation traps heat
- Stocking density: More birds = more metabolic heat
- Housing design: Low roof height, poor insulation = heat trap
- Litter condition: Wet litter increases ammonia and heat Ignoring these factors and blaming "summer" is lazy management.

5. Early Warning Signs (Most Farmers React Too Late)

By the time mortality rises, you're already losing money.

Early indicators:

- Mild panting
- Wings spread away from body
- Reduced movement
- Drop in feed intake (first measurable sign)
- Increased water consumption

Advanced stage:

- Severe panting
- Lethargy
- Prostration
- Sudden death

If you wait for visible distress, you've already lost control.6. Nutritional Strategies: Where Most Operations Fail

You cannot manage heat stress without adjusting nutrition. Period.

6.1 Energy Adjustment

- Reduce dietary energy from fat oxidation heat
- Increase easily digestible energy sources
- Avoid excess protein (protein metabolism produces heat)

6.2 Electrolyte Balance

Maintain Dietary Electrolyte Balance (DEB):

• Ideal range: 250–300 mEq/kg

Use:

• Sodium bicarbonate

• Potassium chloride

This helps maintain acid-base balance disrupted by panting.

6.3 Vitamins and Antioxidants

Heat stress increases oxidative damage.

Critical supplements:

• Vitamin C (200–300 mg/kg feed or water supplementation)

• Vitamin E

• Selenium

6.4 Feed Timing Strategy

• Feed during cooler hours (early morning, late evening)

• Avoid peak heat feeding

If your birds are not eating, your feed formulation is irrelevant.

7. Water Management:

The Most Underrated Control Tool

Water is not just hydration—it's your primary cooling system.

Key principles:

• Cool, clean water (ideal: 18–22°C)

• Increase drinker space

• Ensure constant supply (no interruptions)

• Flush lines regularly

Critical mistake:

Warm water supply during peak heat = reduced intake = faster mortality.

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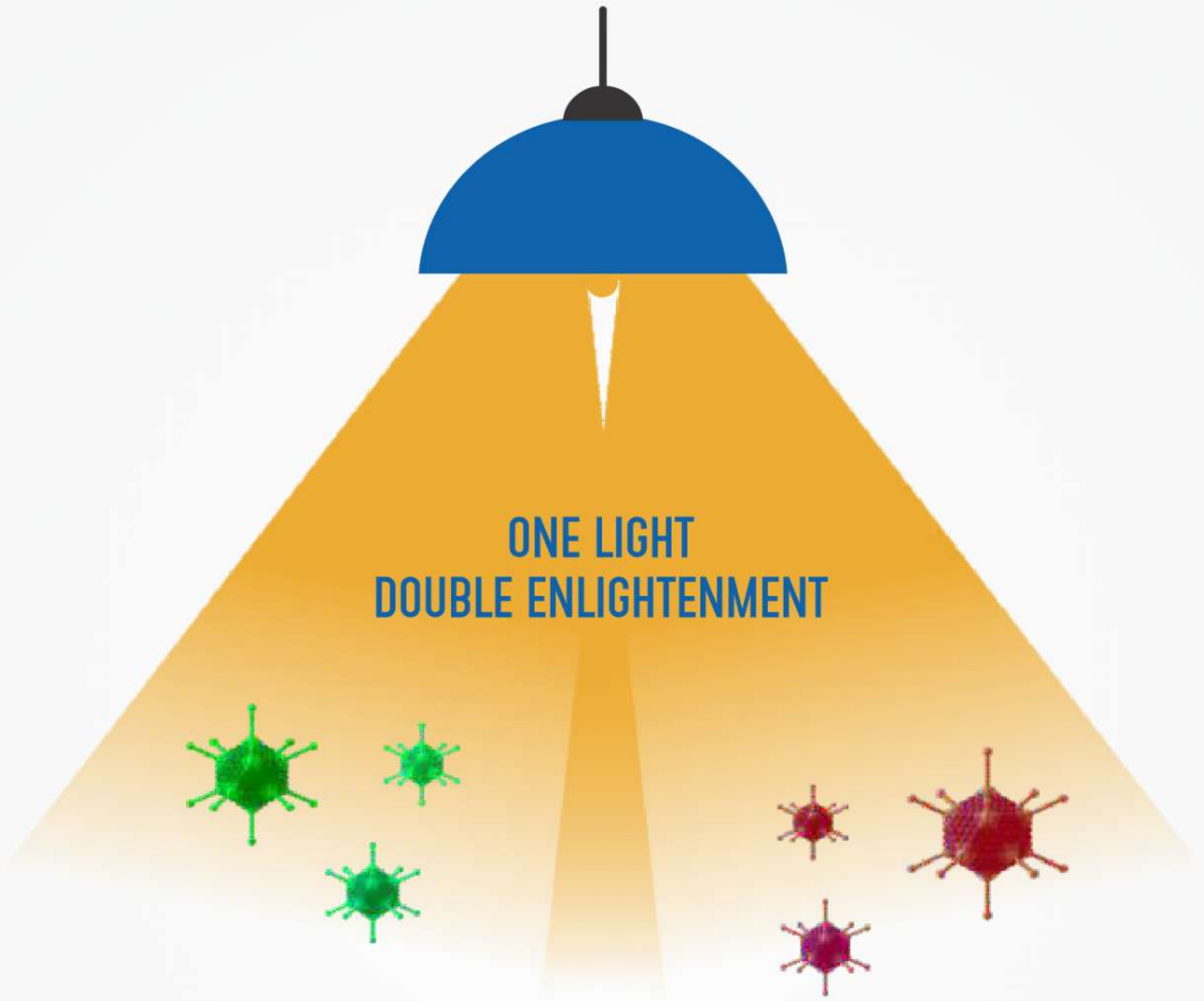

Coercive Power To Control Different Fowl Adenovirus Serotypes

Vaccination - Strategies

- PDRC survey showed that FAdV serotype 4 & 11 are majorly prevalent in India.
- Ventri's IBH/HPS vaccine is found to be protective against the prevalent serotypes.
- On proper vaccination of breeders with Ventri's vaccine there is transfer of maternal antibodies to the progeny chicks providing protection against disease.

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8. Housing and Ventilation: The Real Game Changer

If your housing design is poor, no supplement will save you.

8.1 Ventilation Systems

- Natural ventilation is insufficient in high-density systems
- Use tunnel ventilation for large-scale operations
- Target airspeed: 2–3 m/s

8.2 Evaporative Cooling Systems

- Foggers
- Misting systems
- Cooling pads

These reduce ambient temperature effectively but must be managed to avoid excessive humidity.

8.3 Roof and Insulation

- Reflective roofing materials
- Insulated ceilings
- Increased roof height

8.4 Stocking Density

Reduce density during summer:

- Broilers: reduce by 10–20%
- Layers: adjust cage density accordingly

If you refuse to reduce density, accept higher mortality—it's a direct trade-off.

9. Management Interventions That Actually Work

9.1 Lighting Adjustment

- Reduce light intensity during peak heat
- Shift lighting schedule to cooler periods

9.2 Handling and Stress Reduction

- Avoid handling during hot hours
- Minimize transport stress

9.3 Litter Management

- Keep litter dry
- Reduce ammonia buildup

9.4 Emergency Cooling Measures

- Spray water on roofs
- Increase airflow immediately
- Provide electrolyte water

10. Role of Microbial Feed Additives (Advanced Strategy)

This is where modern systems outperform traditional farms.

Probiotics and Prebiotics

- Improve gut health under stress
- Enhance nutrient absorption

Postbiotics

- Reduce inflammatory responses
- Improve resilience

Enzymes

- Improve feed digestibility
- Reduce metabolic heat production

If you're not integrating gut-health strategies, you're operating at a disadvantage.

11. Disease Risk Under Heat Stress

Heat stress weakens immune response, making birds vulnerable to:

- Newcastle disease
- Infectious bronchitis
- Coccidiosis
- E. coli infections

Vaccination alone is not enough. Stress management determines vaccine effectiveness.

12. Precision Farming and AI-Based Monitoring (Future Direction)

Modern poultry operations are shifting toward:

- Real-time temperature monitoring
- Automated ventilation control
- AI-based behavior tracking

Sensors can detect early stress indicators before human observation.

If you're running large-scale operations without data monitoring, you're guessing—not managing.

13. Strategic Framework for Summer Management

Stop treating heat stress as an emergency. Treat it as a system.

Pre-Summer Preparation

- Upgrade ventilation systems
- Adjust feed formulations
- Train staff

During Summer

- Monitor temperature and humidity continuously
- Adjust feeding and watering schedules
- Apply cooling strategies proactively

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Post-Summer Evaluation

- Analyze performance losses
- Identify system failures
- Improve for next cycle

14. Common Mistakes (Brutal Truth)

Let's call out the real problems:

- Overcrowding for short-term profit
- Ignoring ventilation investment
- Late reaction to early signs
- Poor water management
- Blind reliance on supplements

These are not external problems. These are management failures.

15. Conclusion

Heat stress in poultry production is predictable, measurable, and controllable. Yet, many producers continue to suffer losses because they treat it reactively rather than strategically.

The difference between a struggling farm and a profitable one in summer is not luck—it's preparation, system design, and disciplined execution.

If your birds are dying in summer, the weather is not the cause.

Your system is.

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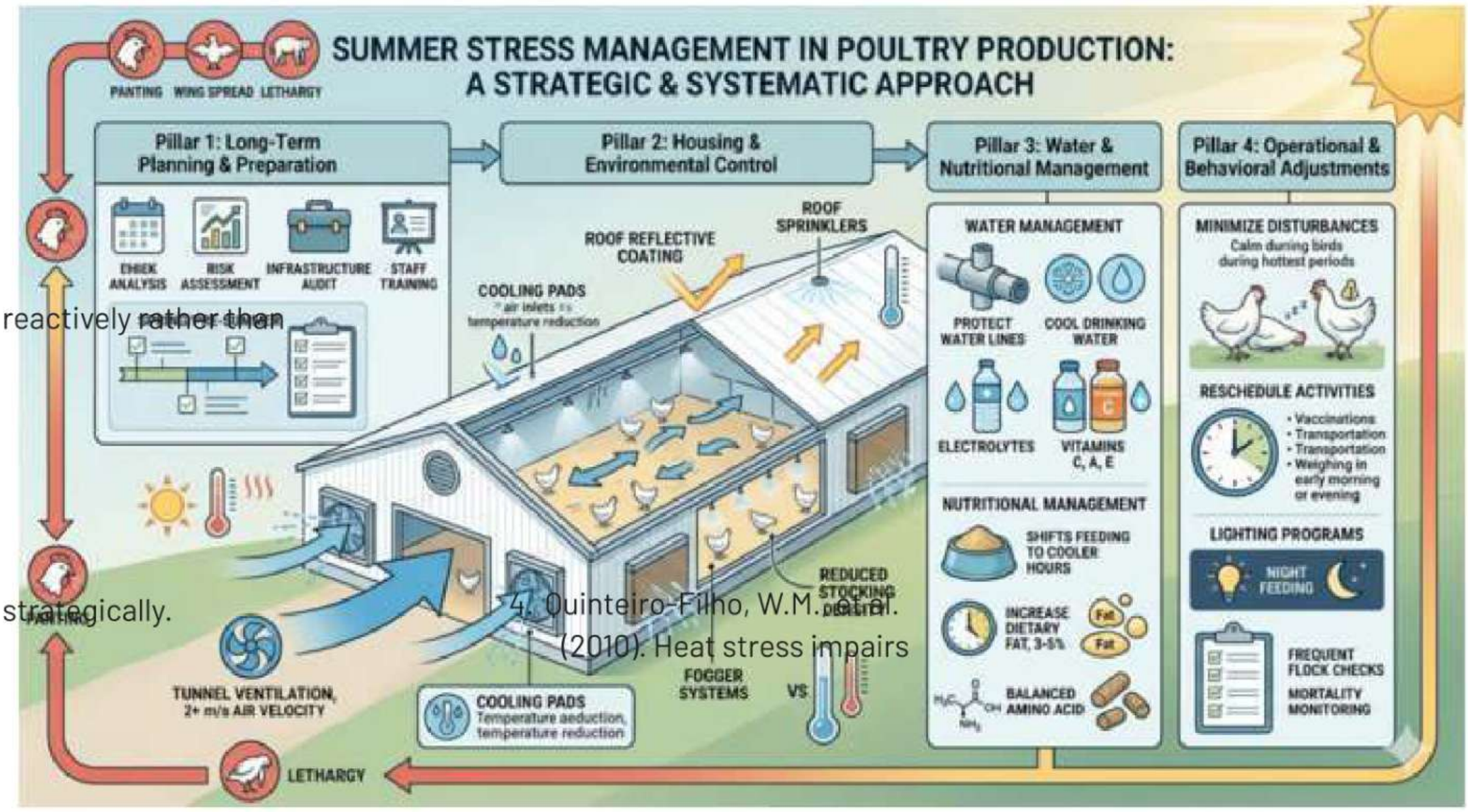

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Beat the Heat. Beat the Stress

Authors: Dr. C.S. Bedi, Dr. Himali Kishor Gotarane, Dr. Nithin Reddy, Dr. Arun Kumar
Guybro Animal Health Pvt. Ltd.

As summer sets in from March, day temperatures in many parts of India often begin crossing 33–35°C, pushing birds beyond their comfort zone and increasing the risk of excessbody heat accumulation and dehydration. High environmental heat places tremendous physiological pressure on birds, making it difficult for them to maintain normal body temperature and hydration. Unlike mammals, poultry lack sweat glands and rely mainly on panting and behavioural adjustments to dissipate excess body heat. Under normal climatic conditions, birds maintain a balance between body heat production and heat loss through efficient respiration and circulation.

However, when ambient temperatures rise beyond the thermoneutral zone (18–22°C), this balance begins to collapse. Birds start panting rapidly to release excess body heat through respiratory evaporation. Continuous panting results in significant water loss, leading to dehydration and electrolyte imbalance. At the same time, birds reduce feed intake to limit metabolic heat production, which negatively affects growth, productivity, and overall flock performance.

As dehydration progresses, the cellular environment within the body becomes unstable. Loss of intracellular water disrupts metabolic activity, nutrient transport, and normal physiological functions. Blood circulation shifts toward the skin surface to facilitate heat dissipation, while birds reduce movement to conserve energy.

Although these adjustments temporarily help birds cope with heat, prolonged exposure places severe metabolic stress on the body. Immune competence declines, disease susceptibility increases, and farmers often experience reduced growth rate, poor feed efficiency, drop in egg production, and increased mortality during severe summer stress.

Betalife is designed to address these challenges from within the bird's body.Acting as a powerful osmotic protector, **Betalife** supports cellular hydration and helps maintain osmotic balance during heat stress, allowing cells to retain water and function normally even under high temperatures. It replenishes essential ions lost through excessive panting and dehydration, restoring electrolyte balance and supporting proper nerve, muscle, and metabolic activity.

At the same time, **Betalife** provides readily available energy that helps birds cope with the physiological strain of heat stress when feed intake is reduced. By supporting antioxidant defense mechanisms, it also helps protect body cells from oxidative damage commonly associated with thermal stress. In addition, **Betalife** promotes a natural cooling sensation within the oral cavity, stimulating thermoregulatory responses that help birds feel cooler, reduce excessive panting, and maintain a more stable body temperature.

Through this comprehensive support system, **Betalife** helps birds remain hydrated, metabolically stable, and physiologically resilient even under intense summer conditions.

Betalife helps birds effectively manage heat-induced dehydration and elevated body temperature by maintaining fluid and electrolyte balance while protecting cells from water loss. By supporting osmotic regulation within the body, it helps retain intracellular water, stabilize metabolic functions, and reduce the physiological strain caused by heat stress. **Betalife** also provides quick energy during periods of reduced feed intake and supports natural cooling responses that help lower panting and maintain body temperature. By preserving hydration, metabolic balance, and cellular stability, **Betalife** helps reduce mortality, prevent transportation shrinkage in broilers, and sustain better productivity during stressful summer conditions.

By supporting hydration, maintaining fluid balance, and helping regulate body temperature, **Betalife** strengthens the bird's ability to cope with heat stress. Its osmotic protection helps birds remain cool, stable, and productive, making it an effective solution for managing summer stress in poultry.

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HOT WEATHER, HEALTHY FLOCK:

Mastering Summer Stress in Poultry

Burhan Nabi[1] Simran Jeet Singh[2] and Satish Kumar[3]

[1,2]Department of Veterinary Medicine [3]Department of Veterinary Clinical Complex [1,2]Khalsa College of Veterinary and Animal Sciences, Amritsar [3]College of Veterinary and Animal Sciences, Pantnagar.

Introduction

Summer brings a unique set of challenges for poultry farmers, especially in regions where temperatures soar beyond the comfort zone of birds. Unlike mammals, poultry lack sweat glands, making them highly susceptible to heat stress. When exposed to high ambient temperatures, birds struggle to regulate their body temperature, leading to reduced productivity, poor health, and in severe cases, mortality. Effective summer stress management is therefore not just a matter of animal welfare but also a critical factor in maintaining farm profitability.

Understanding Heat Stress in Poultry

Heat stress occurs when birds are unable to balance their body heat production with heat loss. The thermoneutral zone for poultry generally ranges between 18°C and 24°C. When temperatures exceed this range, especially above 30°C, birds begin to experience stress.

Causes of Heat Stress

- High ambient temperature
- High humidity levels
- Poor ventilation
- Overcrowding
- Inadequate water supply
- Nutritional imbalances

Humidity plays a critical role because it reduces the effectiveness of evaporative cooling (panting), which is the bird's primary method of heat dissipation.

Signs and Symptoms of Heat Stress

Early detection is key to minimizing losses. Poultry farmers should closely monitor their flocks for the following signs:

- Panting or rapid breathing
- Wings spread away from the body
- Reduced feed intake
- Increased water consumption
- Lethargy and reduced activity
- Drop in egg production and quality
- Thin-shelled or shell-less eggs
- Increased mortality in severe cases

Behavioural changes are often the first indicators, and timely intervention can prevent escalation.

Impact of Heat Stress on Poultry Production

Heat stress affects multiple aspects of poultry production:

1. Reduced Growth Rate

Broilers consume less feed during hot weather, leading to slower weight gain and poor feed conversion efficiency.

2. Decline in Egg Production

Layers experience a drop in egg production, along with deterioration in egg size, shell thickness, and internal quality.

3. Weakened Immunity

Heat stress suppresses the immune system, making birds more susceptible to diseases such as coccidiosis and respiratory infections.

4. Economic Losses

Lower productivity, increased mortality, and higher management costs directly impact farm profitability.

Housing Management Strategies

Proper housing design and management are fundamental in reducing heat stress.

1. Ventilation

- Ensure adequate airflow using natural or mechanical ventilation.
- Install exhaust fans and air inlets for better air circulation.
- Use tunnel ventilation systems in large commercial farms.

2. Roof and Insulation

- Use reflective roofing materials to reduce heat absorption.
- Apply white paint or lime

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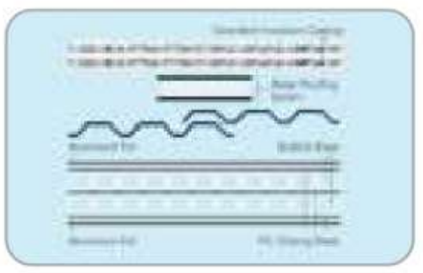

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coating on roofs to reflect sunlight.

- Install insulation materials such as thatch, thermocol, or false ceilings.

3. Orientation and Spacing

- Construct poultry houses in an east-west direction to minimize direct sunlight exposure.
- Avoid overcrowding; maintain recommended stocking density.

4. Cooling Systems

- Foggers, misters, and sprinklers can help reduce ambient temperature.
- Evaporative cooling pads are effective in controlled environment houses.

Nutritional Management

Diet plays a crucial role in helping birds cope with heat stress.

1. Feed Timing

- Offer feed during cooler parts of the day (early morning and late evening).
- Avoid feeding during peak heat hours.

2. Energy-Dense Diet

- Increase energy concentration using fats and oils, as they produce less metabolic heat compared to carbohydrates.

3. Electrolyte Balance

- Supplement drinking water with electrolytes like sodium, potassium, and chloride.
- Helps maintain acid-base balance and hydration.

4. Vitamins and Minerals

- Vitamin C and Vitamin E are particularly effective in reducing heat stress.
- Provide adequate calcium and phosphorus for layers.

5. Protein Adjustment

- Avoid excess protein, as its metabolism generates more heat.
- Use balanced amino acid formulations instead.

Water Management

Water is the most critical factor during summer.

- Ensure continuous access to clean, cool drinking water.
- Increase the number of drinkers to prevent competition.
- Clean water lines regularly to avoid contamination.
- Use chilled water if possible, especially during extreme heat.

Water consumption can increase up to two to three times during hot weather, so supply must be adequate.

Health and Disease Management

1. Vaccination

- Maintain a proper vaccination schedule to prevent disease outbreaks.

2. Biosecurity

- Limit farm visitors and maintain hygiene to reduce infection risks.

3. Monitoring

- Regularly check flock health and mortality rates.
- Isolate sick birds immediately.

4. Use of Additives

- Probiotics and herbal supplements can improve gut health and stress tolerance.

Emergency Measures During Heat Waves

In extreme conditions, immediate actions are required:

- Sprinkle cool water on the roof and surrounding areas
- Increase ventilation and fan speed
- Add ice to drinking water (in small-scale farms)
- Reduce bird density temporarily
- Avoid handling or transporting birds during peak heat

Quick response can significantly reduce mortality during sudden heat waves.

Role of Technology in Heat Stress Management

Modern poultry farming increasingly relies on technology:

- Automated climate control systems
- Temperature and humidity sensors
- Smart ventilation systems
- Mobile apps for real-time monitoring

These tools help farmers maintain optimal conditions and respond promptly to environmental changes.

Sustainable and Long-Term Strategies

To ensure long-term resilience:

- Adopt climate-resilient poultry breeds
- Invest in energy-efficient housing systems
- Use renewable energy sources like solar panels
- Implement water conservation techniques

Sustainability not only reduces costs but also enhances farm adaptability to changing climate conditions.

Conclusion

Summer stress management in poultry is a multifaceted challenge that requires a combination of good housing, proper nutrition, efficient water management, and vigilant health monitoring. As climate change continues to intensify heat waves, proactive strategies are essential to safeguard poultry health and maintain productivity.

Farmers who adopt scientific and practical approaches to heat stress management will not only reduce losses but also ensure consistent performance throughout the year. Ultimately, the key lies in understanding the needs of the birds and creating an environment where they can thrive—even under harsh summer conditions.

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TECHNICAL BULLETIN

Huveshield™ NDK: Field Validation of Protective Immune Response Against Newcastle Disease Virus in Poultry

KEY TAKEAWAYS

- Huveshield™ NDK vaccination induced protective HI antibody titres in breeder, layer, and broiler flocks under commercial field conditions.
- Robust humoral immune responses were observed after more than three weeks post-vaccination.
- The vaccine demonstrated consistent immunogenicity across multiple geographic regions of India.
- Observed regional variations in antibody titres highlight the importance of optimal vaccine handling, administration practices, and flock management.
- The results support Huveshield™ NDK as an effective component of Newcastle Disease prevention programs in commercial poultry production.

INTRODUCTION

Huveshield™ NDK is an inactivated Newcastle Disease vaccine formulated with the lentogenic **LaSota strain** of Newcastle Disease Virus (NDV) in an oil and water emulsion. Huveshield™ NDK is designed to provide sustained antigen release, promoting prolonged immune stimulation and durable protective immunity against the target pathogen.

Monitoring vaccine induced immunity under field conditions is essential for evaluating vaccine performance. Serological assessment of NDV specific antibodies remains a widely accepted approach for measuring immune response following vaccination.

TECHNICAL NOTE

The Hemagglutination Inhibition (HI) assay is widely recognized as the gold standard serological method for evaluating antibody mediated immunity against Newcastle Disease Virus in poultry. HI titres are commonly used to assess vaccination success and monitor immune status in commercial flocks.

Protective antibody levels detected in vaccinated birds indicate successful immunogenic stimulation following vaccination and provide an important indicator of population level protection against Newcastle Disease.

OBJECTIVE

To evaluate the immunogenicity and field effectiveness of the **Huveshield™ NDK** vaccine by analysing the serological immune response in vaccinated poultry through determination of antibody titres against Newcastle Disease Virus (NDV).

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TECHNICAL BULLETIN

STUDY PERIOD

October 2025 – February 2026

STUDY SET-UP

Poultry farms located across different regions of India were included in the field evaluation. Breeder, layer, and broiler flocks were vaccinated with the **Huveshield™ NDK vaccine** according to the recommended vaccination schedule and dose.

Blood samples were collected from vaccinated birds after more than **three weeks post-vaccination** to assess the development of humoral immune response. Serum samples obtained from these blood samples were subjected to serological analysis.

STUDY DESIGN

This study represents a **retrospective serological evaluation of Newcastle Disease vaccination response** in poultry populations. The analysis was performed using **310 serum samples** collected during routine monitoring of **20 vaccinated flocks** between **October 2025 and February 2026**.

MEASUREMENT PARAMETERS

The immune response to vaccination was assessed using the following parameters:

- Hemagglutination (HA) test for determination of NDV antigen titre before HI test.
- Hemagglutination Inhibition (HI) test for quantification of NDV specific antibodies in serum samples.
- Mean HI antibody titres across different poultry farms.
- Uniformity of immune response within flocks.

RESULTS

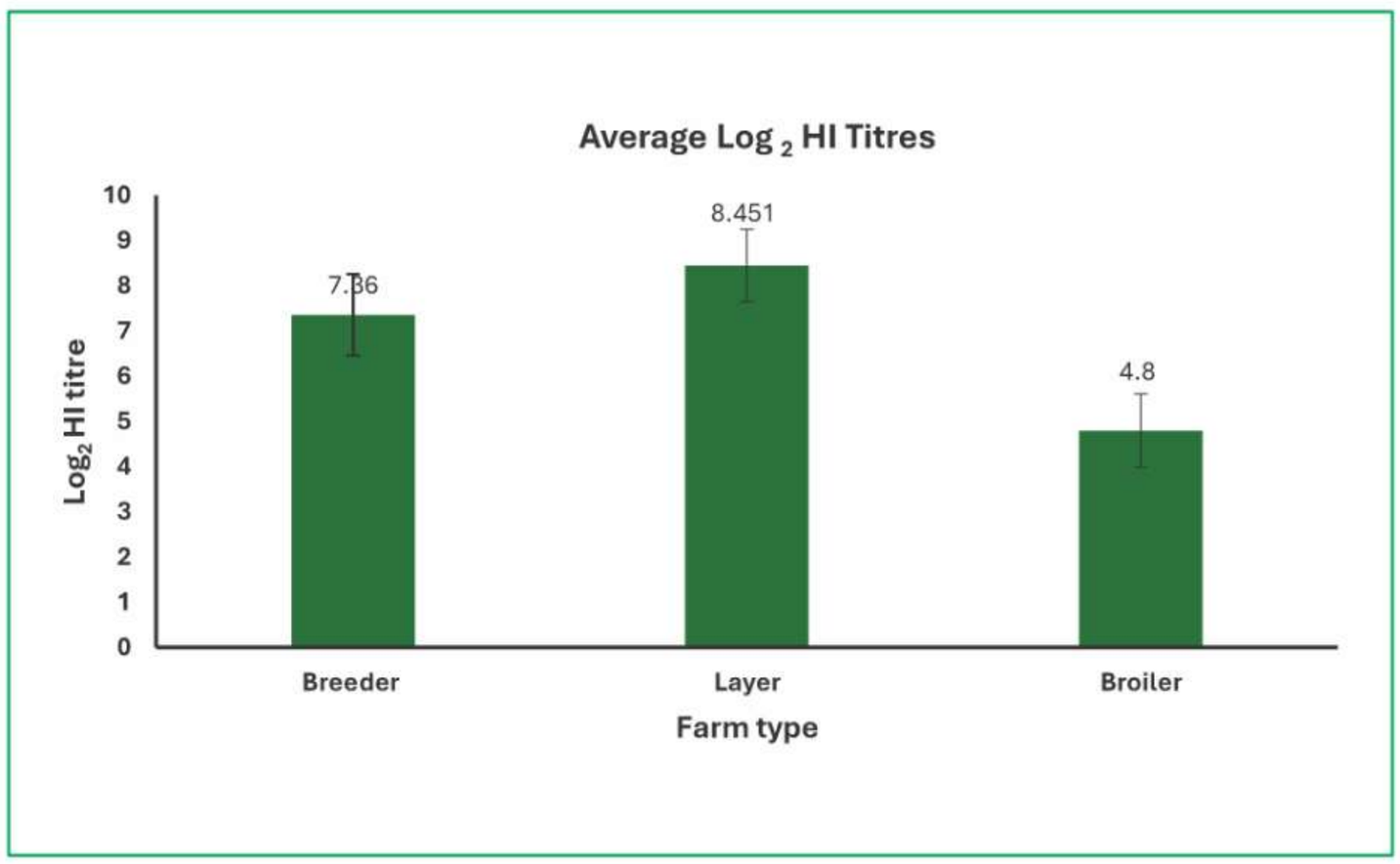

Figure: Mean Log_2 Hemagglutination Inhibition (HI) antibody titres against Newcastle Disease Virus (NDV) in serum samples collected after more than three weeks post vaccination with Huveshield™ NDK across different poultry farms. **Note:** HI titres were determined using 4 Hemagglutinating Units (4 HAU) of NDV antigen. Values represent average antibody titres measured from field samples collected across multiple poultry farms in India during the study period (October 2025 – February 2026).

Serological analysis revealed that **all vaccinated poultry flocks developed protective levels of antibodies against Newcastle Disease Virus**, as determined by the Hemagglutination Inhibition (HI) test.

The mean HI titres observed in different poultry farms indicated a **robust humoral immune response following vaccination with Huveshield™ NDK**. However, analysis of the data across different geographic regions showed **zone-wise variation in antibody titres**, suggesting differences in immune response intensity between locations. Such variability may arise from factors including flock management practices, vaccination handling, environmental conditions, and bird health status.

INTERPRETATION

The data demonstrate that vaccination with **Huveshield™ NDK** induced measurable antibody responses in breeder, layer, and broiler flocks. Higher HI titres indicate stronger humoral immunity and better protection against Newcastle Disease.

Serological response measured by HI titres post ND vaccination are commonly used as an indicator of protective immunity and may reflect cross reactive immunity against heterologous field genotype such as VII & XIII.

FIELD STUDY DISCLAIMER

The data presented in this bulletin are derived from field monitoring of commercial poultry flocks vaccinated with Huveshield™ NDK between October 2025 and February 2026. Immune responses observed under field conditions may vary depending on factors including flock management practices, vaccination schedule and technique, environmental conditions, and overall bird health status.

CONCLUSION

Field serological monitoring demonstrated that Huveshield™ NDK vaccination consistently induced protective levels of NDV specific antibodies in breeder, layer, and broiler flocks under commercial poultry production conditions.

The strong humoral immune responses observed across multiple geographic regions reinforce the reliability, immunogenicity, and field performance of Huveshield™ NDK as an effective vaccine for Newcastle Disease control in poultry.

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BEAT THE HEAT: STRATEGIES TO SHIELD POULTRY FROM SUMMER STRESS

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Summer heat is more than just uncomfortable for poultry. It is a silent productivity thief that can cripple farm income if left unmanaged. Unlike mammals, birds cannot sweat, making them exceptionally vulnerable to rising temperatures and humidity. When the temperature-humidity index (THI) climbs above 75–80, poultry enter a state of physiological crisis marked by panting, metabolic imbalance, and systemic oxidative stress. For poultry farmers in tropical and subtropical regionswhere climate change is intensifying heatwaves, understanding and countering summer stress is notoptional, it is essential for survival.

What is Heat Stress?

Heat stress occurs when birds are unable to dissipate excess body heat effectively. High ambient temperature combined with humidity worsens the situation, making it difficult for birds to maintain thermal balance. The ideal temperature for poultry lies between 18–24°C, and anything beyond this range begins to affect their performance.

Spot the Warning Signs Early

- Panting and open-mouth breathing
- Reduced feed intake and increased water consumption
- Wings spread away from the body
- Lethargy and reduced activity
- Drop in egg production and poor shell quality
- Increased mortality in severe cases

What Heat Stress Does

- Growth Performance: Reduced feed intake leads to poor weight gain in broilers.
- Egg Production: Layers show decreased egg production, smaller egg size, and thin shells.
- Reproductive Efficiency: Fertility and hatchability decline.
- Immune Function: Birds become more susceptible to diseases due to weakened immunity.
- Higher mortality: Severe heat (>35°C) can cause sudden bird deaths

Mitigation Strategies to

Combat Heat Stress

1. Environmental Management

- Ensure proper ventilation in poultry houses
- Integrate trees and use reflective paints (silver/white) or aluminium roofing
- Installingevaporative cooling pads or misting systems can drop ambient temperatures by 4–6°C.
- Reduce stocking density to avoid heat buildup
- Implement intermittent lighting schedules (e.g., 12 hours light:12 hours dark)

2. Nutritional Management

- Feeding during cooler parts of the day (early morning or evening) reduces metabolic heat (20-70%)
- Supplement with electrolytes, vitamins (especially Vitamin C @200mg/kg feed& E @ 100-250mg/kg feed) and betaine @0.25g/kg feed
- Supplement glutamine to boost antioxidant defense,and probiotics (Weizmanniacoagulans and rye-grass-derived lactic acid bacteria) to improve gut health andheat tolerance
- Use phytogenic additives (rosemary and oregano extracts, dried plum powder)
- Increase energy-dense feed (3–5% fat)to compensate for reduced intake

3. Water Management

- Ensure continuous availability of fresh, cool water
- Add electrolytes to maintain hydration and balance
- Provide shade to water tanks and pipelines to keep water cool

4. Health and Disease Control

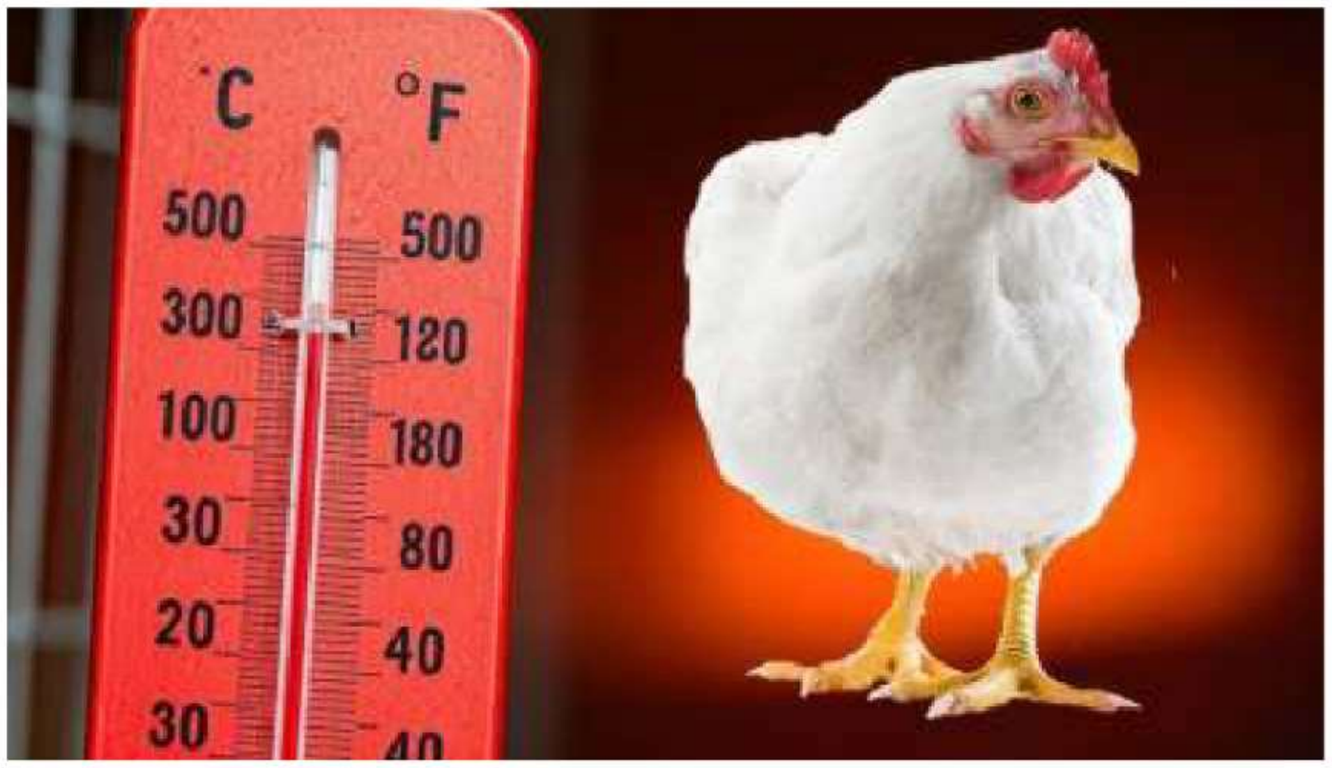
- Maintain strict biosecurity
- Vaccinate birds as per schedule
- Monitor flock regularly for early disease detection

5. Other Management

- Hang wet gunny bags for cooling air
- Reduce handling during hot hours
- Keep litter dry

Conclusion

With rising global temperatures, heat stress is becoming an increasingly serious challenge in poultry farming. However, with proper planning, environmental control, and nutritional support, its impact can be minimized. A proactive approach not only ensures bird welfare but also sustains productivity and profitability.



POULTRY FARMING IN SUMMER

Managing Heat Stress for Better Productivity

Mr. Rakesh Kumar
Founder,
Growel Agrovet Private Limited
www.growelagrovet.com

"Summer heat is not just a seasonal challenge—it's a profitability test for every poultry farmer."

Rising temperatures during summer create extreme stress conditions for poultry birds, significantly affecting their health, welfare, and production performance. Among all environmental factors, heat stress is the most critical, often leading to reduced growth, lower egg production, and increased mortality.

Understanding and managing heat stress is essential for maintaining farm profitability and bird welfare.

WHAT IS HEAT STRESS?

Heat stress occurs when birds are unable to balance body heat production and heat loss.

Key Facts:

- Normal body temperature: 41°C
- Heat stress begins above 35°C
- Comfort zone: 18°C – 28°C
- Birds cannot sweat; cooling happens through panting

QUICK CALLOUT

When temperature rises, productivity falls.

Even a small increase in heat can reduce feed intake and growth.

WHAT HAPPENS INSIDE THE BIRD?

As temperatures increase:

- Birds start panting rapidly (up to 250 breaths per minute)
- Loss of carbon dioxide disturbs blood pH balance
- Essential electrolytes like potassium are lost
- Water intake increases but retention decreases
- This leads to dehydration and weakness

IMPACT ON POULTRY PRODUCTION

Heat stress directly affects farm income:

- Reduced feed intake
- Slow growth in broilers
- Drop in egg production
- Poor eggshell quality
- Weak immunity

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· Higher mortality

Disease Risk Increases:

E. coli, CRD, and gout

SIGNS FARMERS SHOULD NOT IGNORE

· Panting and open-mouth breathing
· Excessive water intake
· Loss of appetite
· Reduced egg production
· Poor weight gain
· Sudden deaths in severe heat

SUMMER MANAGEMENT STRATEGY

Success in summer depends on four pillars: Housing, Water, Feed, and Farm Practices.

HOUSING MANAGEMENT

· Maintain east–west shed orientation
· Use white-painted or insulated roofs
· Ensure proper cross ventilation
· Install fans, foggers, or cooling systems
· Use thatched roofing where possible
· Plant trees for natural shade

Tip:

A well-ventilated shed can reduce heat stress even without lowering temperature.

WATER MANAGEMENT (MOST CRITICAL)

Water intake increases 3–4 times during summer.

· Provide cool, clean drinking water (15–21°C)
· Increase the number of drinkers
· Add electrolytes (1–2 gm per litre)
· Cover water tanks to avoid direct sunlight
· Ensure uninterrupted water supply

Note: Even a short water shortage can lead to mortality.

FEED MANAGEMENT

· Feed birds during morning and evening
· Increase nutrient density
· Add extra vitamins and minerals (20–30%)
· Supplement Vitamin C
· Balance amino acids (Methionine and Lysine)
· Use antifungal agents in feed

Expert Insight:

Low feed intake combined with poor nutrition leads to major summer losses.

GENERAL FARM PRACTICES

· Avoid overcrowding
· Provide extra floor space (10%)
· Use fresh and dry litter
· Handle birds during cooler hours
· Ensure proper ventilation systems
· Use foggers or sprinklers to reduce temperature

Field Tip:

In severe cases, heat-stressed birds may be dipped in cool water for a short duration, keeping the head above water.

FINAL WORD

Small management changes can create big results in summer poultry farming.

With proper planning, farmers can:

· Reduce mortality
· Maintain productivity
· Improve profitability

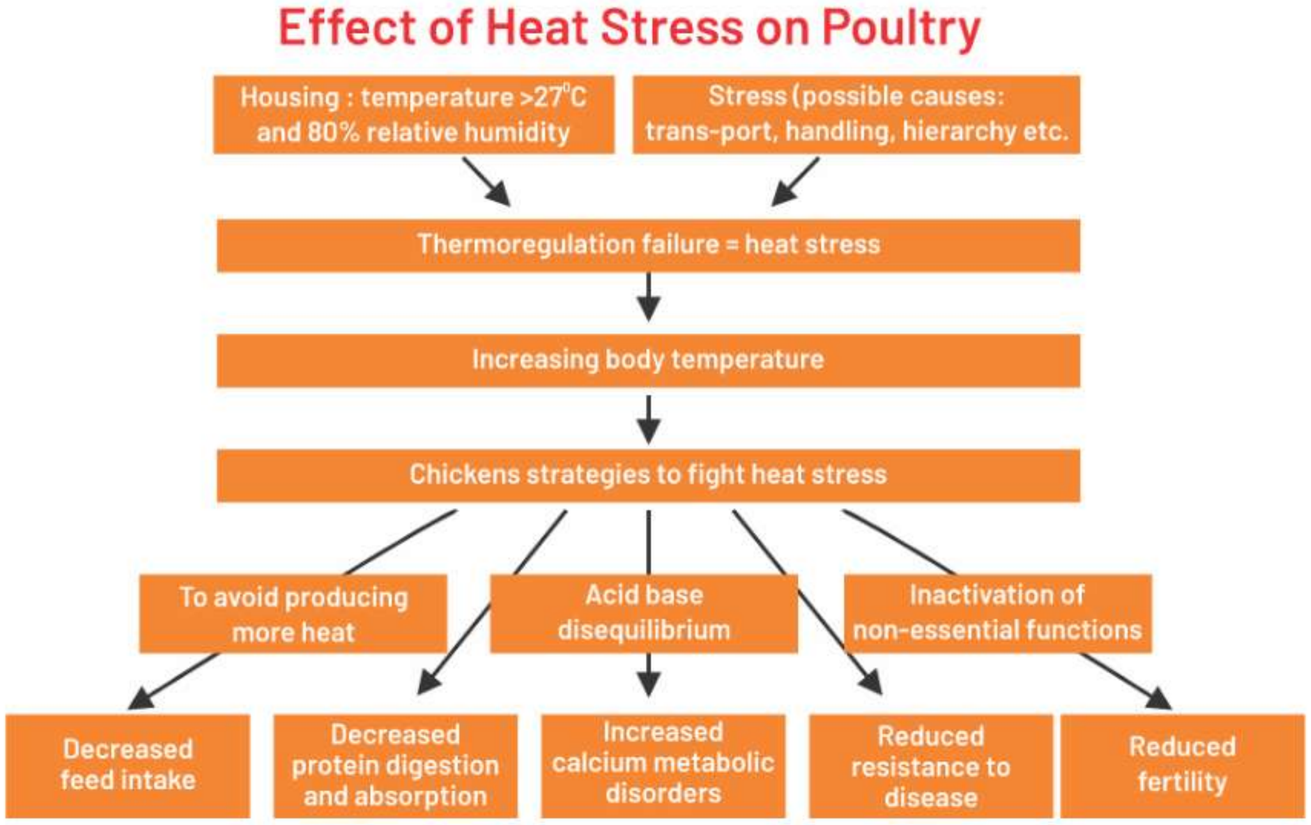
Heat stress may be unavoidable, but losses are preventable.

CONCLUSION

Poultry farming in summer requires awareness, preparation, and proper management. By focusing on housing, hydration, nutrition, and ventilation, farmers can maintain healthy birds and ensure consistent production even during extreme heat.

KEY TAKEAWAYS

· Water is more important than feed in summer
· Ventilation is the most effective cooling method
· Early management prevents heavy losses
· Healthy birds ensure a profitable farm.



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Managing Summer Stress in Poultry: Nutritional and Practical Approaches

Introduction

Summer stress is one of the most critical challenges faced by poultry farmers, especially in tropical regions like India. High ambient temperatures combined with humidity lead to heat stress, which significantly affects bird health, productivity, and farm profitability.

What is Summer Stress in Poultry?

Summer stress occurs when birds are unable to maintain their body temperature due to excessive environmental heat. Poultry do not have sweat glands and rely on panting to regulate body temperature, which leads to increased respiratory rate, reduced feed intake, electrolyte imbalance, and lower immunity.

Impact on Poultry Production

Summer stress leads to reduced body weight gain in broilers, drop in egg production and shell quality in layers, poor feed conversion ratio, increased mortality in severe cases, and higher susceptibility to diseases.

Nutritional Management Strategies

Maintaining electrolyte balance through sodium, potassium, and chloride is essential to prevent dehydration and support metabolism. Vitamin supplementation, especially Vitamin C, Vitamin E, and Selenium, helps reduce oxidative stress and improve immunity. Proper mineral balance including zinc and chromium supports enzyme activity and stress resistance. Probiotics help improve gut health, digestion, and nutrient absorption.

Practical Farm Management

Ensure proper ventilation and air circulation inside poultry sheds. Provide cool and clean drinking water at all times. Use foggers or sprinklers for cooling. Feed birds during cooler hours such as early morning or evening. Maintain optimal stocking density to avoid overcrowding.

Conclusion

Summer stress can be effectively managed through timely nutritional intervention and good farm management practices. Awareness and proactive measures are essential to maintain poultry health and productivity.

HOW TO IMPROVE EGG PRODUCTION NATURALLY: A PRACTICAL GUIDE FOR POULTRY FARMING

Simran jeet Singh[1] Burhan Nabi[2] and Satish Kumar[3]

[1,2] Department of Veterinary Medicine

[3]Department of Veterinary Clinical Complex

[1,2]Khalsa College of Veterinary and Animal Sciences, Amritsar

[3]College of Veterinary and Animal Sciences, Pantnagar.

Introduction

Egg production is a cornerstone of poultry farming and plays a vital role in ensuring both economic returns and nutritional security. In recent years, there has been a growing shift toward natural and sustainable farming practices, driven by consumer demand for organic products and the need to reduce dependency on synthetic inputs. Improving egg production naturally is not only feasible but also beneficial for long-term poultry health, environmental sustainability, and farm profitability. A holistic approach that integrates proper breed selection, balanced nutrition, effective management, and natural health care practices can significantly enhance egg-laying performance.

Selection of Suitable Breeds

The foundation of successful egg production begins with the selection of appropriate poultry breeds. High-performing layer breeds such as White Leghorn, Rhode Island Red, and Plymouth Rock are widely recognized for their productivity and adaptability. However, indigenous breeds also hold significant value due to their resilience, disease resistance, and ability to thrive under local climatic conditions. Selecting birds with good genetic potential, uniform growth, and optimal body weight ensures a strong start toward achieving higher egg yields.

Nutrition

It is arguably the most critical factor influencing egg production. A balanced diet rich in protein, energy, vitamins, and minerals is essential for sustaining high laying performance. Protein is particularly important for egg formation, while calcium plays a crucial role in the development of strong eggshells. Natural feed ingredients such as maize, wheat, soybean meal, green leafy vegetables, and kitchen waste can provide the necessary nutrients in a cost-effective manner. Incorporating calcium sources like crushed oyster shells or limestone further supports shell quality. Additionally, maintaining consistency in feeding schedules and avoiding abrupt dietary changes help in preventing stress and production drops.

Water

It is often overlooked, is equally vital for optimal egg production. Birds require a constant supply of clean and fresh water, as even short periods of dehydration can lead to a significant decline in egg output. Ensuring proper hygiene of drinkers and providing adequate water during hot weather conditions are essential management practices. Natural additives such as herbal extracts or jaggery solutions may

also be used during extreme weather to maintain electrolyte balance.

Housing and environmental management

It plays a crucial role in reducing stress and promoting productivity. Birds should be provided with adequate space, proper ventilation, and clean, dry litter to ensure comfort and health. Overcrowding and poor ventilation can lead to disease outbreaks and reduced egg production. Open-sided housing systems that allow natural airflow and sunlight are particularly effective in maintaining a healthy environment. Cleanliness and regular maintenance of the poultry house further contribute to improved performance.

Light

It is another important factor regulating egg production, as it directly influences the reproductive cycle of birds. Adequate exposure to light, ideally 14 to 16 hours per day, stimulates laying activity. While natural sunlight is the best source, artificial lighting may be used to supplement shorter daylight hours, especially during winter months. Consistency in lighting duration is crucial, as sudden changes can negatively affect production.

Stress management

It is essential for maintaining consistent egg production. Poultry birds are highly sensitive to environmental and managerial changes. Factors such as excessive noise, overcrowding, extreme temperatures, and rough handling can induce stress and reduce laying efficiency. Providing a calm environment, maintaining appropriate stocking density, and allowing natural behaviors such as dust bathing can help minimize stress levels.

Disease prevention

It is another key component of natural egg production. Healthy birds are more productive and require fewer interventions. Natural remedies such as garlic, turmeric, neem, and aloe vera can be incorporated into feed or water to enhance immunity and prevent infections. Maintaining strict hygiene, following vaccination schedules, and isolating sick birds are essential practices that support flock health without excessive reliance on chemicals.

Gut health

It has a direct impact on nutrient absorption and overall productivity. The use of natural probiotics such as curd or fermented feed improves digestion and enhances feed efficiency. A healthy gut not only supports better egg production but also strengthens the immune system, reducing the risk of disease outbreaks.

Molting

It is a natural process in poultry, temporarily halts egg production as birds shed and regenerate feathers. Allowing natural molting and providing adequate nutrition during this period ensures that birds return to production with improved efficiency. Proper care and management during and after molting are essential to maintain long-term productivity. The integration of free-range systems can further enhance natural egg production. Allowing birds access to open spaces enables them to forage for insects, grasses, and other natural feed sources, thereby improving their nutritional intake and overall well-being. Free-range systems also reduce feed costs and improve egg quality, making them an attractive option for sustainable poultry farming.

Traditional or ethno-veterinary practices

They offer valuable, low-cost solutions for improving poultry health and productivity. The use of locally available herbs and natural remedies can effectively control diseases and parasites while minimizing chemical usage. Practices such as providing neem leaves for parasite control or turmeric for immunity enhancement have been successfully used in many rural farming systems.

Maintaining optimal body weight

It is another important factor influencing egg production. Underweight birds may exhibit delayed laying and reduced egg size, while overweight birds often face reproductive

challenges. Regular monitoring and proper feed management help in maintaining the ideal body condition required for consistent production.

Micro nutrients

such as vitamins and minerals also play a crucial role in egg production. Deficiencies in calcium, phosphorus, vitamin D, and vitamin E can lead to poor eggshell quality, reduced fertility, and lower production rates. Providing natural sources of these nutrients, along with adequate sunlight exposure, ensures proper metabolic functioning.

Parasite control

It is essential for maintaining flock health and productivity. External parasites like lice and mites, as well as internal worms, can significantly affect egg production. Natural control methods such as dust bathing with ash and sand, use of herbal sprays, and regular cleaning of the poultry house can effectively manage parasite infestations.

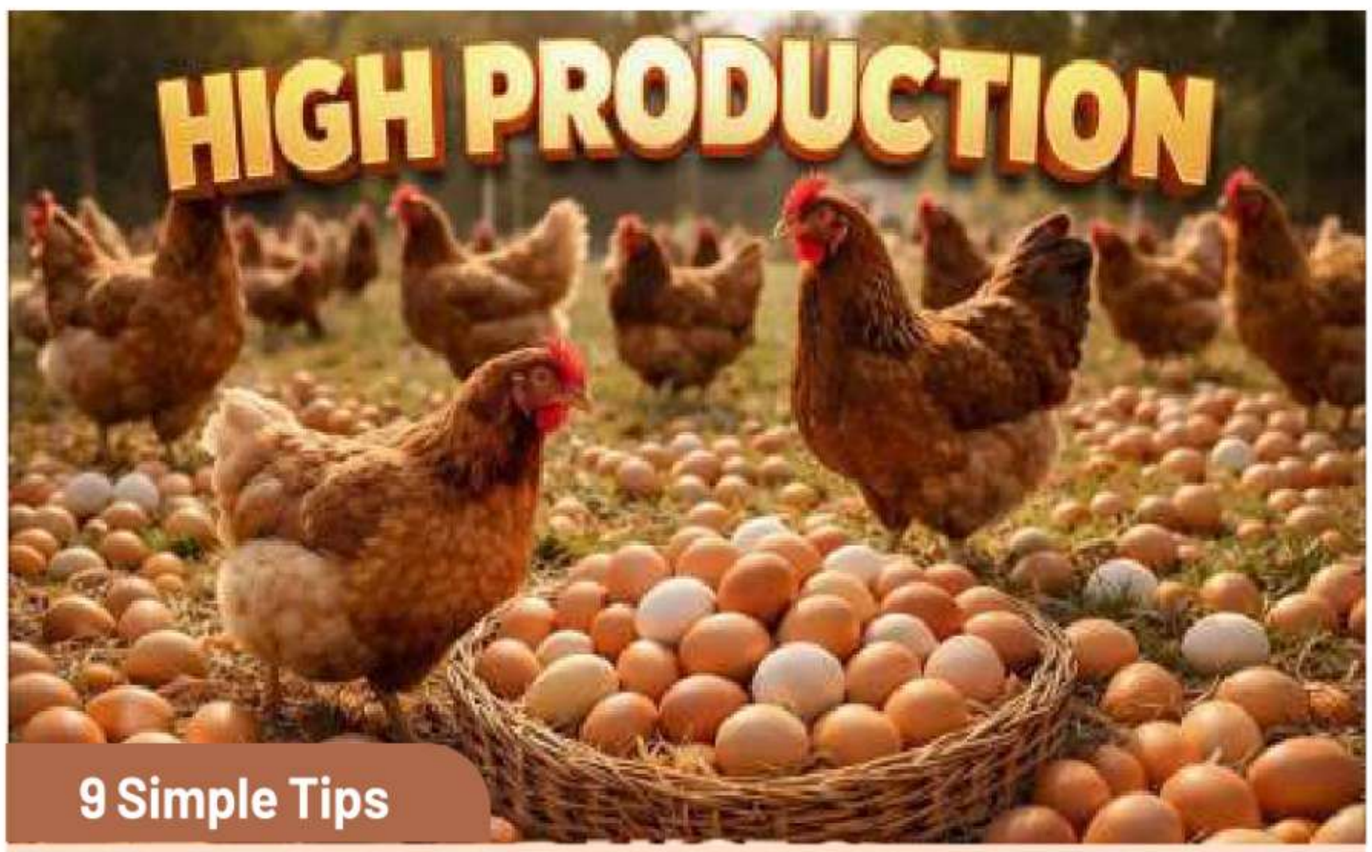
Litter management is another important aspect of poultry farming. Clean and dry litter not only improves bird comfort but also reduces the risk of infections and ammonia buildup.

Regular replacement and proper maintenance of litter contribute to a healthier environment and better productivity.

From an economic perspective, natural methods of improving egg production offer significant advantages. Reduced reliance on commercial feeds and synthetic supplements lowers production costs, while the growing demand for organic and naturally produced eggs provides opportunities for premium pricing. Farmers adopting natural practices can thus achieve better profitability and market competitiveness.

Conclusion

Improving egg production naturally requires a comprehensive approach that integrates proper breed selection, balanced nutrition, effective management, and natural health care practices. By focusing on bird welfare, environmental sustainability, and cost-effective solutions, poultry farmers can achieve consistent and enhanced egg production. Natural poultry farming not only supports higher productivity but also contributes to healthier food systems and sustainable agricultural practices, making it a viable and rewarding approach for the future.



FEATHERS UNDER FIRE: HEAT STRESS IN POULTRY

Dr. Sumon Nag Chowdhury

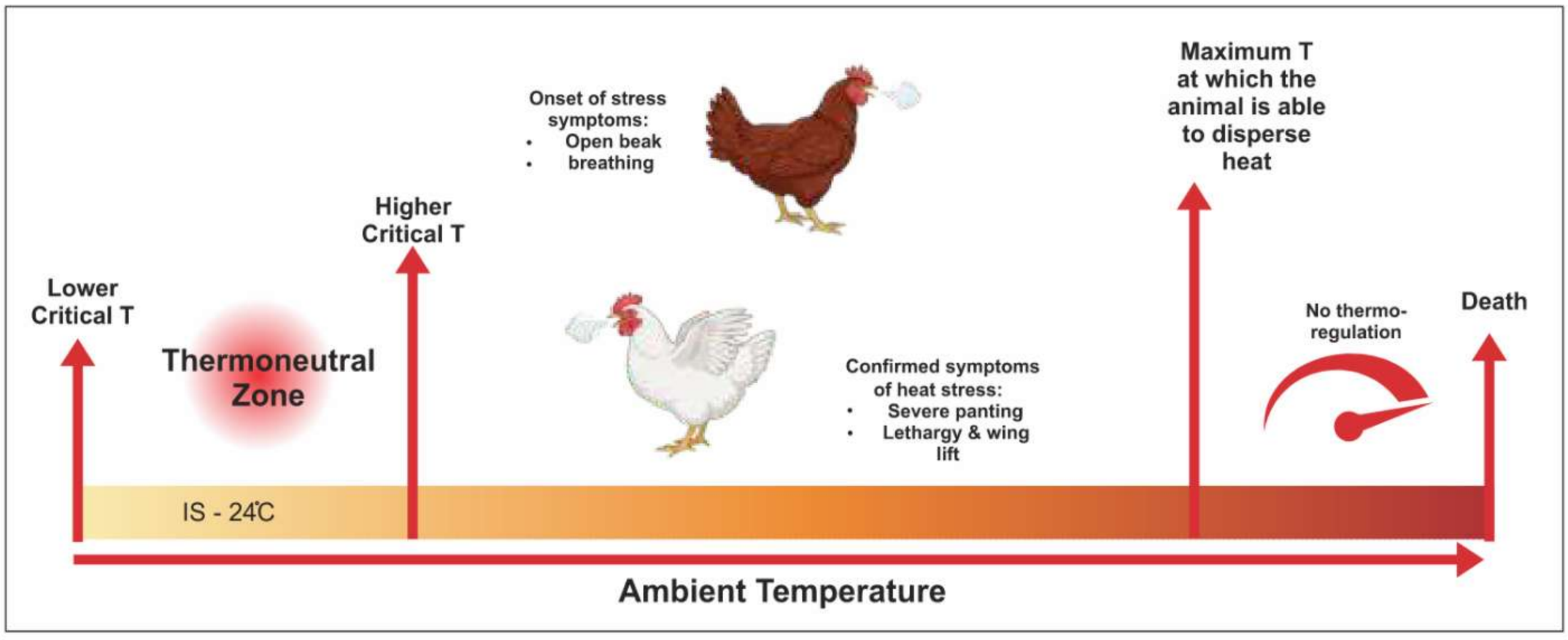
High ambient temperatures significantly impact commercial poultry performance, especially when combined with high humidity. Heat stress occurs when birds struggle to balance heat production and loss, leading to oxidative stress, acid-base imbalance, and weakened immunity. This reduces performance, increases mortality, and compromises meat and egg quality, causing global economic losses of $128–$165 million—expected to rise with increasing temperatures. Mitigation strategies include providing cool water, adjusting feed intake, using feed additives, and incorporating heat-tolerant genes like naked neck (Na) and frizzle (F). However, only a few of these methods are widely adopted in the industry.

Here's a more detailed look at heat stress in poultry:

CAUSES OF HEAT STRESS:

Birds are homeothermic, maintaining a stable body temperature within limits. In the thermoneutral zone (18-21°C for optimal growth), they regulate heat naturally. Chickens have a normal body temperature of 41-42°C (106°F).

Beyond the upper critical temperature, birds lose heat by panting. While initially normal, excessive panting indicates stress. If heat production surpasses maximum heat loss—acutely or chronically—birds may die. Studies show heat stress begins above 25°C, and a body temperature rise of over 4°C is fatal. Adult birds take about five days to acclimate but are vulnerable to sudden temperature shifts.



The following factors combined make chicken especially vulnerable to heat stress:

- High Ambient Temperatures: Poultry are particularly vulnerable to heat stress during periods of high temperatures, especially when combined with high humidity and low airflow.
- Lack of Cooling Mechanisms: Poultry lack sweat glands and rely on panting and heat dissipation through their skin to regulate body temperature. Further, covering of feathers over body limit the bird's ability to dissipate heat. Overall, the mechanism may not be sufficient in extreme heat.
- High Metabolic Rate: Chicken have a high metabolic rate, generating more internal heat, making them more susceptible to heat stress.
- Chicken Genetics: To fulfil the demands, there has been an immense improvement in chicken genetics in the past decade. Broiler chickens, which weighed around 900 g in 56 days in the 1950s, were around 4202 g in 2005. Similarly, in laying hens the Hen Housed Production was 270 at 72 weeks in 1981. In 2023, it is 340 at 72 weeks, 386 at 80 weeks and 490 at 100 weeks! These improved broilers and laying hens have higher metabolic rates and

HOW DOES POULTRY DISPERSE HEAT?

1. Conduction — Through the contact between the bird to a surface such as the litter or a wall
2. Convection — similar to the previous one bu through a moving medium like a forced flow of air
3. Irradiation — Irradiation of heat into the surrounding environment via electromagnetic waves (often open its wings slightly to facilitate heat exchange)
4. Evaporation — Significant- occurs via the skin or open beak breathing
5. Excretion — Increasing the rate of excretion of liquids through liquid urine and faeces

BIOLOGICAL CHANGES IN POULTRY DUE TO HEAT STRESS:

Heat stress in poultry causes behavioral, physiological, and neuroendocrine changes, impacting health and performance.

The effects vary with exposure duration and frequency. Acute heat stress often leads to mortality, primarily from suffocation, while chronic exposure results in performance decline due to oxidative stress.

In hot weather. damp litter will make heat stressed birds feel much more uncomfortable than dry litter. In dry litter. birds will attempt to dust bathe more readily to aid cooling.

Behavioral

- Panting and open-mouth breathing
- Increased water intake and reduced feed intake
- Lethargy and reduced activity levels
- Elevated wings
- Restlessness and seeking shade

Neuroendocrine

- ↑ Corticotrophin Releasing Factor (CRF)
- ↑ Adrenocorticotrophic Hormone (ACTH)
- ↑ Plasma corticosterone
- ↑ Catecholamines
- ↓ T3
- ↓ Gonadotrophin Releasing Hormone (GnRH)
- ↓ FSH & LH

Physiological

- Oxidative stress
- Acid base imbalance
- Respiratory alkalosis
- Increase in H/Lratio
- Change in caecal microbial profile

Neuroendocrine

- ↓ Growth rate and production
- ↑ FCR
- ↑ Susceptibility to diseases
- ↑ Mortality rate
- ↓ Hatchability
- ↓ Poor meat and egg quality

MITIGATION STRATEGIES:

Environmental Management:

·Cooling Systems: Use misting, evaporative cooling, and fans to reduce temperature and humidity.

·Ventilation: Ensure proper cross ventilation to expel hot, humid air and improve airflow.

·Shade: Provide shaded areas or shade cloth; straw thatching and side pandals help lower shed temperatures.

·Cool Water: Maintain a constant supply of cool, fresh water, as birds drink more during heat stress.

Nutritional Strategies:

·Feed Restriction: Limit feed intake during peak heat hours to reduce metabolic heat production; feed during cooler times.

·Feed Additives: Use additives to support physiological functions, boost immunity, and sustain productivity under heat stress.

Other Strategies:

- Reduce Stocking Density: Reducing stocking rate prior to hot weather will reduce heat produced in a house, improve air movement around the birds and allow remaining birds time to recover.
- Litter Management: Maintain optimum litter moisture.
- Breed Selection: Consider using heat-tolerant breeds or lines.
- Early Detection: Monitor birds for signs of heat stress and take corrective action promptly.

LAST FEW WORDS

With the increasing global temperatures, heat stress has become a significant challenge for the poultry industry. No single approach alone is enough to negate the impacts of heat-stress on poultry, there is a need for a holistic approach to attenuate the negative effects. The potential use of heat-resistant breeds along with proper nutrition, housing, and management practices, can be beneficial in mitigating the heat stress.

Additive	Mechanism	Benefits
Electrolytes ($NaHCO_3$, KCl, $MgSO_4$)	Maintain acid-base balance, prevent dehydration	Improve eggshell quality, support metabolism
Vitamin C	**Antioxidant, reduces oxidative stress**	**Boosts feed intake, enhances egg production**
Vitamin E	Protects cell membranes, lowers stress hormone (corticosterone)	Strengthens immunity, supports growth & reproduction
Betaine	**Osmolyte, methyl donor, maintains hydration**	**Enhances gut integrity, improves feed efficiency**
Sodium Bicarbonate	Regulates pH, improves electrolyte balance	Enhances hydration, physiological stability
Selenium	**Neutralizes ROS, key enzyme component (GSH-Px)**	**Improves growth, immunity, and production efficiency**
Zinc	Reduces oxidative damage, supports gut integrity	Enhances immune function, heat resilience
Sodium Zeolite (Na Aluminosilicate)	**Balances electrolytes, improves mineral absorption (Ca, P)**	**Mitigates thermal stress, strengthens gut health, improves egg & bone quality**
Probiotics & Prebiotics	Maintain gut microbiota balance	Boost nutrient absorption, immunity
Plant Extracts &Phytogenics (Menthol, Tumeric, Ginger)	**Cooling, anti-inflammatory, antioxidant effects**	**Enhance gut health, immunity, and feed intake**

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Press Release

ESSENCE NATURA EXHIBITS AT IPPE 2026 IN ATLANTA, USA

Essence Natura, with its innovative photogenic products, successfully showcased its cutting-edge solutions at the IPPE 2026 exhibition in Atlanta, USA, from January 27-29. The company's participation was a resounding success, with a strong turnout of visitors from North, Central and South American countries.

The event provided a valuable platform for Essence Natura to connect with potential clients, partners and industry experts, generating significant interest in its product portfolio. The company received overwhelmingly positive feedback, with attendees praising its innovative approach and commitment to quality.

Key highlights of the exhibition included the establishment of new business leads, strategic partnerships and productive meetings with existing associates. The event also sparked exciting ideas for future product development, further solidifying Essence Natura's position in the industry.

Press Release

WE ARE DELIGHTED WITH THE RESPONSE TO OUR PARTICIPATION IN IPPE 2026," SAID DR PUNEET TRIPATHI, EXECUTIVE DIRECTOR, ESSENCE NATURA PVT LTD.

"The event exceeded our expectations and we are grateful for the opportunity to engage with our audience and showcase our expertise. We are excited about the new opportunities that have emerged and look forward to continued success and growth."

Essence Natura's successful participation in IPPE 2026 has opened up new avenues for growth, collaboration and innovation, reinforcing the company's commitment to delivering exceptional products and services to its global clientele

HAR GHAR HAR DIN CHICKEN PROTEIN: IB GROUP'S NATIONWIDE MISSION LED BY MR. BAHADUR ALI, MD, IB GROUP

Bahadur Ali
Managing Director
of IB Group

New Delhi [India], March 23: India's growing focus on nutrition and protein security has brought attention to leaders who are shaping the country's food ecosystem. Widely regarded as the father of modern poultry in India, Bahadur Ali, Managing Director of IB Group, stands out as a visionary entrepreneur whose leadership has transformed IB Group into one of India's leading integrated poultry and protein enterprises. He has expanded its presence across multiple states while empowering thousands of farmers and rural entrepreneurs through its integrated poultry model. By building strong partnerships with farmers and strengthening modern supply chains, the company has contributed not only to India's nutrition ecosystem but also to rural employment and livelihoods.

IB Group stands as India's only poultry company with complete backward and forward integration, managing the entire value chain from feed production, breeding, and farming to processing and nationwide distribution. This integrated model ensures quality control, efficiency, and consistent supply, enabling the company to deliver safe, affordable chicken protein to consumers across India.

Recognizing India's persistent nutritional gap, IB Group launched the nationwide campaign "Har Ghar Har Din ABIS Chicken Protein." Covering over 2,500 tehsils across 20 states from Kashmir to Kanyakumari, the initiative encourages families to include protein in their daily diets while building grassroots awareness about nutrition and the importance of protein for healthier communities.

Speaking about the initiative, Bahadur Ali said, "Protein should not be seen as a luxury but as a daily necessity for every Indian household. Our campaign **'Har Ghar Har Din ABIS Chicken Protein'** is creating awareness at the grassroots level, and the support from our farmers and partners is helping us reach lakhs of families across the country.

India continues to face a serious protein deficiency, largely due to limited awareness about the importance of protein in daily nutrition. While the country successfully addressed food shortages during the Green Revolution and strengthened milk production through the White Revolution, the focus remained mainly on increasing calorie availability rather than ensuring balanced nutrition. As a result, a large section of the population still consumes meals dominated by carbohydrates such as rice and wheat, with insufficient intake of protein-rich foods. Many households are unaware that protein is essential for muscle development, immunity, growth in children, and overall health. Protein is often perceived as something only needed by athletes or fitness enthusiasts, rather than a daily dietary requirement for everyone.

Bridging this awareness gap is critical to improving India's nutritional health and ensuring that families understand the role of protein in building a stronger and healthier nation. Among the many sources of protein available, chicken has emerged as one of the most sustainable and commercially viable options. Poultry production requires relatively fewer natural resources, has a shorter production cycle, and allows high-quality protein to reach consumers at an affordable cost. This makes chicken protein an accessible and practical solution to address India's growing nutritional needs.

Aligned with the vision of Viksit Bharat articulated by Prime Minister Narendra Modi, IB Group continues to strengthen its value chain from farm to consumer, ensuring that affordable and quality protein reaches millions of households.

Through this mission, IB Group continues to work toward building a protein-inclusive India & a healthier future for the nation.

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- Range – 8% to 40% Refer To Thickness Setting Chart For the Specific Commodities.
- Consistency – 0.2% (10%-17%)
- Temperature Compensation – Automatic
- Size (L x B x H in cm) – 30 x 17 x 26 (approx.)
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- Power – 230V, 50Hz, AC Mains or 6 (R-20) type dry cells.

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LANXESS: VIRKON S TURNS 40!

Disinfectant successfully used for four decades in stable hygiene and disease control

Mumbai,19th March2026–Four decades of service to animal health: Virkon S from LANXESS celebrates its anniversary! Since its market launch in 1986, the specialty chemicals company's disinfectant has established itself as the standard in livestock biosecurity, promoting animal health and combating animal diseases worldwide.

Its track record is impressive: Virkon S has been tested effective on over 230 microorganisms. This includes more than 100 virus strains in 34 virus families, more than 90 bacterial strains, and over 40 fungal and yeast strains. In recent decades, the product has been used successfully to contain Avian Influenza, African Swine Fever, Vesicular Swine Disease, and Foot-and-Mouth Disease, among others.

Virkon S also enjoys a high level of trust at the government level worldwide. Authorities in numerous countries have included it in their programs as the disinfectant of choice in their emergency plans for combating animal diseases outbreaks.

Produced in Sudbury, UK, Virkon S is currently available in over 80 countries. This is because LANXESS has continuously obtained further approvals for the product – both in terms of the countries in which it is distributed and the areas of application, i.e., the animal diseases it can be used to combat.

A key advantage of Virkon S is its fast action: The broad-spectrum virucidal disinfectant kills viruses and bacteria within seconds or minutes.

The product is also easy to use and highly versatile, with approvals for a wide range of applications supporting critical animal hygiene activities. In many markets, it is approved for the disinfection of animal drinking water. It helps farmers to maintain daily hygiene, and to respond quickly to sudden disease outbreaks.

“Celebrating its 40th anniversary, Virkon S continues to offer a proven and broad-spectrum effectiveness. Our mission remains unchanged: We want to safeguard animal health and support livestock producers to overcome biosecurity challenges”, says Stefanie Gschwandner, Head of Market Segment LANXESS Biosecurity Solutions. “We aim to effectively combat current and future disease outbreaks and prevent their spread”.

* Further information is available at Virkon®
Use biocides safely. Always read the label and product information before use.

About LANXESS:
LANXESS is a leading specialty chemicals company with sales of EUR 6.4 billion in 2024. The company currently has about 11,800 employees in 32 countries.

The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives and consumer protection products. LANXESS has achieved leading positions in the Dow Jones Best-in-Class Index and the MSCI ESG and ISS ESG ratings, among others, for its commitment to sustainability.

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KEN RESEARCH STATED JAPAN POULTRY MEAT PROCESSING EQUIPMENT MARKET TO REACH USD 310 MILLION

A new market analysis by Ken Research highlights a transformative phase in Japan's poultry processing industry, driven by automation, efficiency improvements, and evolving consumer demand. According to the study, the market is currently valued at approximately USD 310 million and is expected to witness steady growth through 2030.

The report outlines how rising consumption of processed poultry products, coupled with increasing demand for automation, is reshaping the industry. Additional factors such as stricter food safety regulations and ongoing labor shortages are pushing companies to modernize their processing infrastructure and invest in advanced equipment.

Spanning more than 80 pages, the study provides in-depth insights into market dynamics, competitive positioning, and emerging investment opportunities. A growing preference among consumers for ready-to-cook and ready-to-eat poultry products is accelerating the adoption of modern processing technologies across Japan.

Industry experts note that the sector is at a critical turning point. A significant proportion of poultry processors are already investing in automation and advanced technologies to address operational challenges, improve efficiency, and meet stringent regulatory standards.

The report identifies several key trends shaping the market. Rising demand for processed poultry continues to be fueled by changing dietary habits and the need for convenient food options. At the same time, the integration of smart technologies—including AI-enabled systems, IoT-based monitoring, and precision processing equipment—is enhancing productivity and ensuring consistent product quality.

Regulatory compliance remains another major driver. Frameworks such as Japan's Food Sanitation Act are enforcing high standards for hygiene, traceability, and food safety, prompting processors to upgrade their equipment and processes. Meanwhile, Japan's aging workforce and persistent labor shortages are accelerating the shift toward automation, as companies look to reduce reliance on manual labor while maintaining output levels.

The study also explores strategic considerations for businesses entering or expanding within the market. It highlights favorable timing for investment, outlines regulatory requirements, and evaluates competitive dynamics among leading global players such as Marel, JBT Corporation, GEA Group, and Buhler Group.

In terms of infrastructure, the expansion of poultry processing facilities in major urban centers like Tokyo, Osaka, and Nagoya is expected to support market growth. Increased investment in cold chain logistics and refrigeration systems is also playing a vital role in maintaining product quality and extending shelf life.

Sustainability is emerging as another priority, with companies adopting energy-efficient equipment and environmentally friendly processing solutions to reduce costs and meet regulatory expectations.

Overall, the report positions Japan's poultry processing equipment market as a key component of the country's broader push toward modernization, offering valuable insights for stakeholders looking to align with future industry trends and capitalize on long-term growth opportunities.

AUTOMATED POULTRY FARM PROJECT REPORT 2026 HIGHLIGHTS GROWTH POTENTIAL AND INVESTMENT OPPORTUNITIES

The global poultry farming industry is experiencing strong growth, driven by rising demand for affordable animal protein, increasing urbanization, and the expansion of organized food processing and retail sectors. According to a recent report by IMARC Group, automated poultry farm projects are emerging as a highly attractive investment opportunity, offering long-term profitability and scalability.

Growing consumer preference for hygienically processed and ready-to-cook poultry products is further accelerating industry expansion. At the same time, government support through subsidies and favorable policies, along with technological advancements such as automated feeding systems, climate-controlled housing, and data-driven farm management, are significantly improving efficiency and productivity across poultry operations.

Market Growth and Industry Overview

The global poultry market continues to expand steadily, supported by increasing consumption of poultry meat and eggs—among the most economical sources of protein. Demand remains strong across both developed and emerging economies, with the Asia-Pacific region leading growth. Countries like India and China are key contributors, driven by rising incomes, population growth, and evolving dietary preferences.

Modern poultry farming has transformed into an integrated industry covering breeding, hatchery management, rearing, processing, packaging, and cold-chain distribution. This shift toward organized, large-scale operations has improved product quality, ensured consistent supply, and enabled more efficient, data-driven management.

Production Capacity and Profitability

Automated poultry farms are typically designed with capacities ranging from 100,000 to 1 million birds per cycle, allowing producers to achieve economies of scale while serving diverse markets such as food processing companies, retail chains, hospitality providers, and export sectors.

Financial projections indicate strong profitability, with gross margins estimated at 20–30% and net margins between 8–15%. These returns are supported by stable demand, value-added processing, and efficient large-scale production systems, offering solid return on investment (ROI) potential.

Cost Structure and Investment Needs

Operating costs are largely dominated by raw materials—primarily chicks, feed, and healthcare inputs—which account for around 70–80% of total expenditure. Utilities contribute approximately 10–15%, while other costs

include labor, transportation, maintenance, and taxes. Long-term supplier partnerships play a key role in managing price fluctuations and ensuring consistent supply. Capital investment requirements depend on farm size, location, and level of automation. Major investments include land development, infrastructure, and equipment such as automated feeders, climate-controlled sheds, incubation systems, processing units, and cold storage facilities. Proper facility planning is essential to ensure efficient operations.

Environment-Controlled Units Enhancing Efficiency

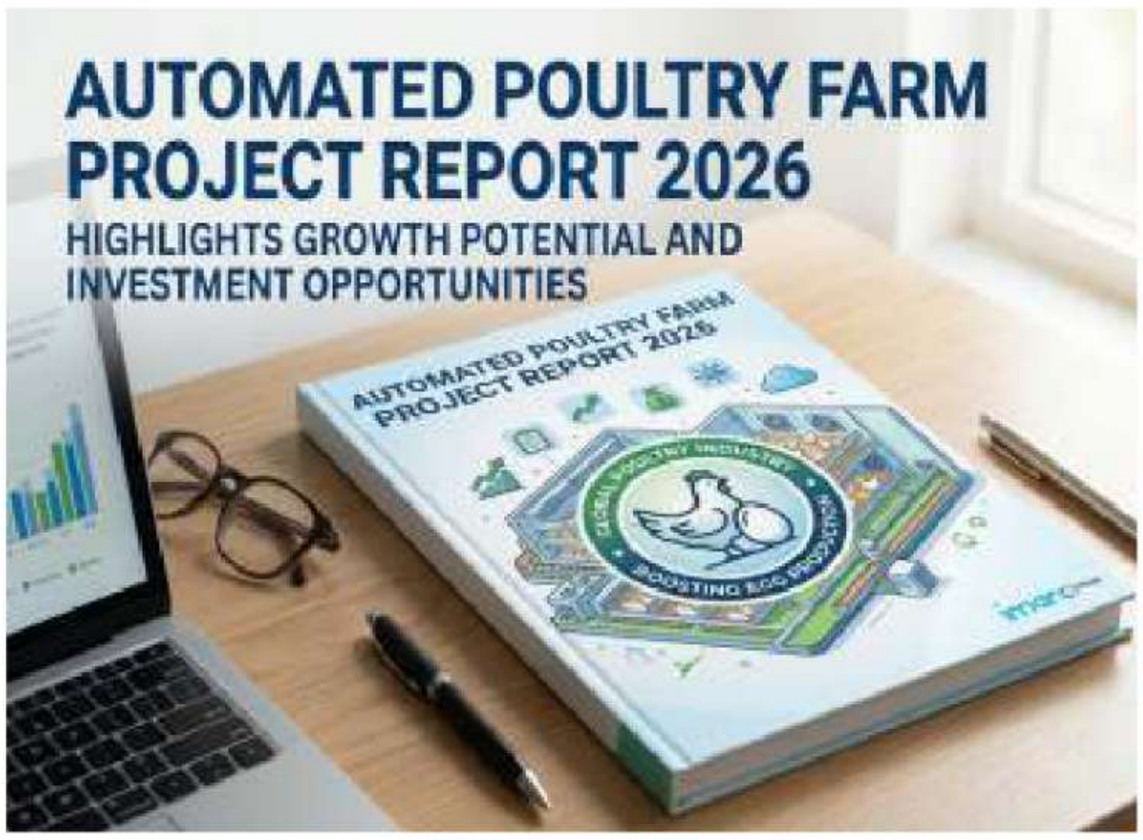
Environment-controlled (EC) units are a key component of modern poultry farms. These systems regulate temperature, humidity, ventilation, and lighting using advanced automation, maintaining optimal conditions throughout the production cycle.

The adoption of EC units leads to improved bird health, reduced mortality rates, better feed efficiency, and consistent product quality. Although the initial setup cost is high, these systems provide long-term operational and financial benefits through enhanced productivity and year-round efficiency.

Applications and Future Outlook

Poultry farming supports a wide range of applications, including fresh and processed meat production, retail distribution, hospitality supply, and value-added product manufacturing. As a vital source of affordable protein, the sector plays a crucial role in global food security.

With strong demand, ongoing technological advancements, and continued government support, the poultry farming industry is expected to maintain steady growth. Its scalable business model and resilient demand make it a compelling investment opportunity for entrepreneurs and investors alike.



BELGIAN POULTRY INDUSTRY HITS HISTORIC RECORD

Belgium has achieved a historic milestone in its poultry sector, recording its highest-ever production of chicken meat in 2025. The country produced an impressive 543 million kilograms of chicken meat, accounting for nearly one-third of its total meat output. This achievement highlights not only the growing domestic demand for poultry but also Belgium's strengthening position within the European poultry industry.

Record-Breaking Poultry Production

In 2025, Belgium's poultry industry reached a new peak with the slaughter of approximately 314.9 million chickens. This marks a 1.7% increase compared to the previous year and represents the highest production level since official records began in 2008. According to Statbel, the steady upward trend observed over the past decade culminated in this record-breaking performance.

Key highlights include:

- Total chicken meat production: 543 million kilograms
- Share in national meat output: Nearly one-third
- Annual growth: 1.7% increase in 2025
- Long-term trend: Consistent growth over the past ten years

This milestone reflects the increasing importance of poultry as a primary protein source in Belgium's food system.

Factors Driving Growth

Several key factors have contributed to this remarkable expansion in Belgium's poultry production:

1. Rising Consumer Demand

Chicken continues to be one of the most affordable and versatile sources of protein. Its widespread use in everyday meals, combined with changing dietary preferences favoring lean meat, has driven steady consumption across households.

2. Strong Export Potential

Belgium's central location in Europe provides a strategic advantage for trade. The country can efficiently export poultry products to neighboring markets, strengthening its position within regional supply chains.

3. Improved Production Efficiency

Advancements in poultry farming practices have played a major role in boosting output. Enhanced hatchery management, better disease control through biosecurity measures, and optimized feed utilization have significantly increased productivity.

4. Industry Adaptability

Despite facing challenges such as rising feed costs and stricter environmental regulations, Belgian poultry producers have demonstrated resilience. By adopting modern technologies and efficient farming techniques, the industry has managed to sustain growth.

Economic and Agricultural Significance

The expansion of Belgium's poultry sector has had a notable impact on both the economy and agricultural landscape:

- **Employment Generation:** Poultry farming, processing, and distribution provide thousands of jobs, particularly in rural areas.
- **Balanced Meat Industry:** Poultry is now competing closely with pork and beef as a major contributor to the country's meat production.

·**Rural Development:**
Increased poultry activity supports local economies, infrastructure, and allied industries such as feed production and logistics.

However, this growth also brings certain concerns, especially related to sustainability.

Environmental and Sustainability Concerns

With increased production comes greater responsibility. The rapid growth of poultry farming raises questions about its environmental footprint:

- Waste management challenges due to higher volumes of manure
- Greenhouse gas emissions associated with intensive farming systems
- Pressure on land and water resources

These concerns are prompting policymakers and industry stakeholders to explore more sustainable practices, including better waste utilization, energy-efficient systems, and environmentally friendly production models.

Belgium in the European Poultry Market

Although Belgium is not among the largest poultry producers globally, it has carved out a strong position within Europe. When compared to major producers like France and Germany—which produce over 1.5 million tonnes of poultry meat annually—Belgium's output is smaller. However, its strength lies in efficiency and productivity relative to its size.

Belgium's poultry sector is known for:

- High production efficiency
- Strong integration within European supply chains
- Ability to compete in export markets despite its smaller scale

This makes Belgium a significant and competitive player in the regional poultry industry.

Future Outlook

Looking ahead, Belgium's poultry industry is expected to maintain stable growth, although the pace may moderate in the coming years:

Growth Projections:
Production is likely to increase gradually through 2027, supported by continued technological advancements and stable consumer demand.

Challenges Ahead:

- Stricter environmental regulations
- Increasing focus on animal welfare standards
- Competition from larger European producers

Emerging Opportunities:

- Expansion into organic and free-range poultry segments
- Development of premium and value-added poultry products
- Adoption of sustainable and climate-friendly farming practices

These opportunities could help the industry diversify and remain competitive in a rapidly evolving market.

Conclusion

Belgium's poultry sector has reached a landmark achievement, with 543 million kilograms of chicken meat produced in 2025. This record underscores the industry's resilience, efficiency, and ability to adapt to changing market conditions. As poultry continues to play a vital role in the country's meat production, Belgium is well-positioned to sustain its growth and strengthen its presence in the European market.

While challenges related to sustainability and regulation remain, the sector's strong foundation and forward-looking approach ensure that it will continue to thrive in the years ahead.

CHICKEN MARKETING SUMMIT 2026 HIGHLIGHTS RISE OF "THE PROTEIN MOMENT"

As global eating habits continue to evolve, the poultry industry is preparing to capitalize on a major shift toward protein-focused diets. Reflecting this trend, the Chicken Marketing Summit 2026 will revolve around the theme **"The Protein Moment,"** emphasizing the growing consumer demand for high-protein foods such as chicken.

Driven by changing dietary guidelines and a rising preference for clean-label products, consumers are increasingly moving away from ultra-processed foods. At the same time, the expanding use of GLP-1 medications—known to influence appetite and food choices—is reshaping how people approach nutrition. Together, these factors are expected to boost chicken consumption significantly in the coming year.

Organized by WATT Global Media, the annual summit will take place from **July 27–29, 2026**, at the Innisbrook Resort in Palm Harbor, Florida. The event will bring together industry leaders, marketers, and supply chain stakeholders to explore strategies for adapting to these emerging consumer behaviors. Early registration discounts are available through May 31.

Recent insights from Circana underline the scale of this shift. Health-conscious consumers now account for approximately $708 billion in annual food and beverage spending, signaling a powerful transformation in purchasing priorities. According to event organizers, understanding this audience will be critical for brands aiming to remain competitive.

The conference will open with a keynote address by Kevin Ryan, who will examine how poultry marketers can leverage the intersection of GLP-1 trends and protein demand to drive growth. His session is expected to provide actionable insights into aligning product offerings with evolving consumer expectations.

Another major highlight will be the presentation of the latest Chicken Consumption Survey. Erkin Peksoz will share exclusive findings on how high-protein diets and GLP-1 medications are influencing purchasing decisions, offering valuable data for industry stakeholders.

The summit will also celebrate innovation through the return of the Chicken Marketer of the Year award, which honors organizations demonstrating excellence in promoting chicken consumption. Nominations for the award are open until May 1, 2026.

In addition to its educational sessions, the event will provide ample networking opportunities, including the traditional opening golf tournament. The summit is produced in collaboration with the National Chicken Council and supported by the National Protein and Food Distributors Association, reinforcing its role as a key platform for industry engagement.

CONFLICT DISRUPTS INDIA'S EGG EXPORTS, PRICES UNDER PRESSURE

Shipments from Namakkal halted; domestic market faces oversupply

India's poultry sector is facing fresh turbulence as ongoing geopolitical tensions disrupt egg exports to key Middle Eastern markets. Namakkal, the country's leading egg export hub, has suspended shipments of nearly **one million eggs per day**, impacting trade flows to Oman, Qatar, and the UAE.

The sudden halt in exports has created a surplus in the domestic market, triggering a sharp decline in egg prices and putting significant financial pressure on layer farmers.

Export Disruptions Trigger Price Fall

With shipping routes affected, exporters are unable to access their traditional markets. As a result, surplus eggs are being redirected to local and alternative markets at reduced prices.

This imbalance between supply and demand has led to:

- Declining farmgate egg prices
- Shrinking profit margins for producers
- Increased market volatility

Industry experts note that while short-term disruptions can be absorbed, prolonged interruptions are amplifying the financial stress across the value chain.

Farmers Bear the Brunt

Layer farmers are among the hardest hit, as falling prices directly impact their returns.

The sudden influx of excess supply in domestic markets has weakened demand-supply equilibrium, leading to mounting losses.

The situation has also affected exporter confidence, with uncertainties around logistics and market access continuing to weigh on the sector.

Efforts to Restore Stability

Poultry associations are actively engaging with government authorities to address the crisis. Key focus areas include:

- Reopening disrupted trade routes
- Exploring alternative export channels
- Ensuring logistical support for exporters
- Providing relief measures for farmers

BIRD FLU KILLS 4,400 CHICKENS IN CHHATTISGARH'S BILASPUR; SURVEILLANCE INTENSIFIED

A recent outbreak of avian influenza, commonly known as bird flu, has resulted in the death of approximately 4,400 chickens at a government poultry farm located in the Koni area of Bilaspur district in Chhattisgarh. The incident occurred over a span of six days, between March 19 and March 24, raising concerns among local authorities and prompting swift containment measures. According to officials, the farm housed a total of 5,037 chickens, indicating that a significant portion of the flock was affected by the viral infection.

Dr. G.S. Tanwar, Joint Director of the Veterinary Department, confirmed the fatalities and stated that the sudden deaths triggered immediate investigation. Samples from the deceased birds were collected and dispatched to specialized laboratories in Bhopal and Pune for testing. The laboratory in Bhopal subsequently confirmed the presence of Avian influenza in the samples, officially establishing the cause of the outbreak.

Following this confirmation, Bilaspur District Collector Sanjay Agrawal promptly issued directives to control and contain the spread of the disease. The response was carried out in accordance with the Government of India's Revised Action Plan for Prevention, Control, and Containment of Avian Influenza (2021). This protocol outlines strict and systematic measures to prevent the spread of infection and protect both animal and public health.

As part of the containment strategy, authorities have designated a one-kilometre radius around the affected poultry farm as an "infected zone." Additionally, a broader area extending up to 10 kilometres from the epicenter has been classified as a "surveillance zone." Within the infected zone, stringent actions are being implemented, including the culling (mass euthanasia) of all poultry birds, as well as the destruction of eggs, feed, and any other potentially contaminated materials. The movement of poultry and poultry-related products has been completely prohibited in this zone to prevent further transmission of the virus.

To support affected poultry farmers and mitigate economic losses, the Animal Husbandry Department has announced compensation for birds that are culled as part of the containment measures. This step is crucial in ensuring cooperation from farmers and maintaining transparency during the process.

Once the culling operation is completed, the poultry farm will be thoroughly disinfected and sealed to eliminate any remaining traces of the virus. Rapid Response Teams (RRTs) have been deployed to manage various aspects of the situation. These teams are responsible for carrying out culling operations, ensuring safe and scientific disposal of carcasses, conducting active surveillance,

and implementing sanitation protocols across the affected and surrounding areas.

Authorities are also installing warning signboards around the infected and surveillance zones to alert the public and restrict unauthorized movement. Strict monitoring of poultry transportation and sales is being enforced, especially in local markets and roadside vendors, to prevent any illegal or unsafe trading practices. Multiple government departments, including revenue, police, urban administration, and local panchayats, are working in coordination to ensure that containment measures are effectively executed.

In addition to animal health measures, human health surveillance has also been prioritized. Workers and individuals who were in close contact with the poultry farm are being closely monitored for any symptoms associated with bird flu. Health officials have stated that anyone showing signs of infection will undergo testing, and antiviral medications will be administered if necessary. This proactive approach aims to minimize any potential risk of transmission to humans, although such cases are relatively rare.

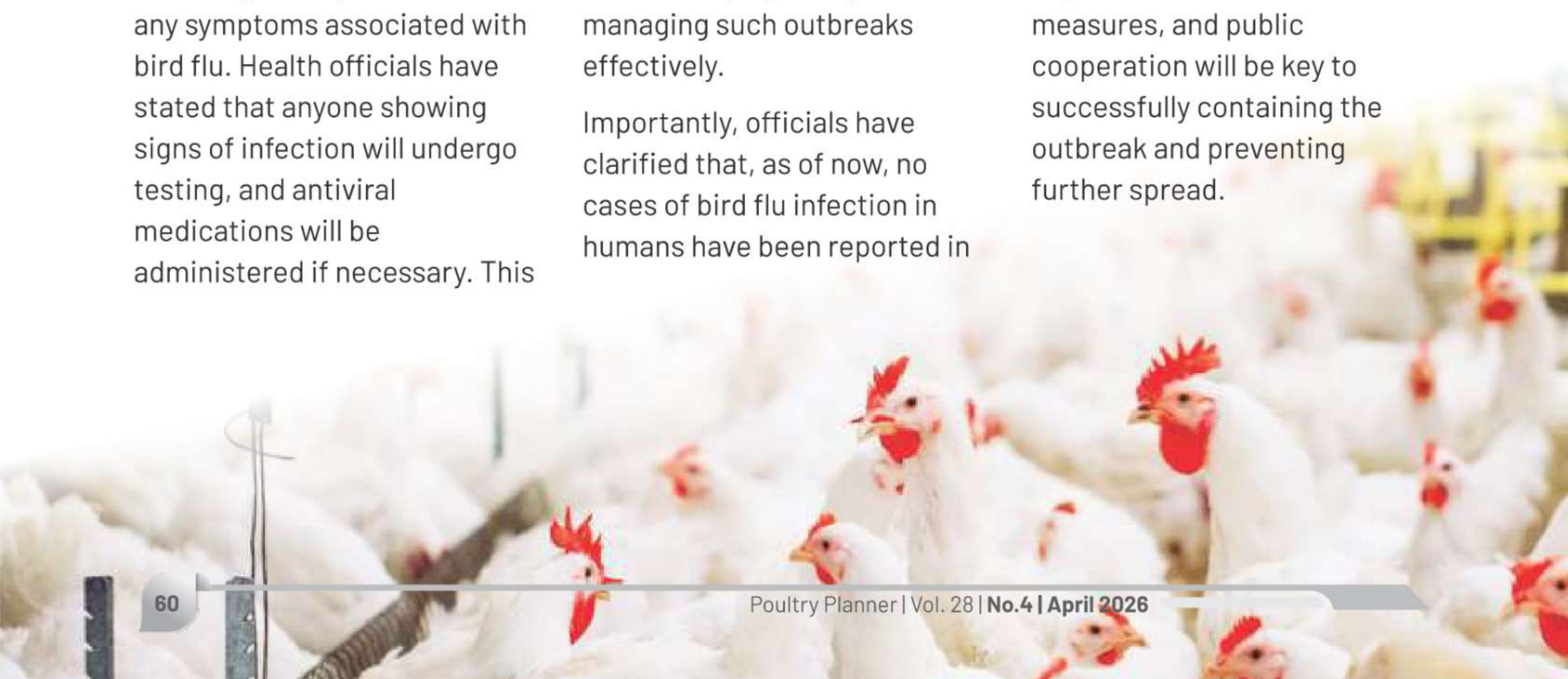
Officials have also intensified monitoring of poultry markets and sale centres across Bilaspur district. Regular inspections are being conducted to ensure compliance with safety guidelines and to detect any unusual bird mortality at an early stage. These steps are essential in preventing the spread of the virus beyond the currently affected area.

The district administration has appealed to the public to remain calm and avoid spreading or believing in rumours. Citizens have been urged to cooperate with authorities, follow advisories, and report any unusual bird deaths to the concerned departments. Public awareness plays a key role in managing such outbreaks effectively.

Importantly, officials have clarified that, as of now, no cases of bird flu infection in humans have been reported in the region. This provides some reassurance, although authorities continue to remain vigilant given the potential risks associated with zoonotic diseases.

Bird flu, or avian influenza, is a highly contagious viral disease that primarily affects birds but can occasionally infect mammals, including humans. It spreads through direct contact with infected birds, their droppings, or contaminated surfaces. Rapid detection and strict containment measures are critical to controlling outbreaks and preventing economic losses in the poultry sector.

Overall, the swift response by local authorities, adherence to established protocols, and coordinated efforts among multiple departments highlight the seriousness with which the situation is being handled. Continued vigilance, effective implementation of control measures, and public cooperation will be key to successfully containing the outbreak and preventing further spread.



SAUDI POULTRY IMPORT BAN: SIGNAL, NOT SHOCK

Saudi Arabia's recent decision to impose a comprehensive ban on poultry meat and table egg imports from 40 countries, including India, is being viewed by industry leaders not as a major disruption, but as a strategic signal for the future of global poultry trade. The restriction, introduced as a precautionary measure to prevent the spread of diseases such as Avian influenza, reflects evolving priorities in food safety, domestic production, and biosecurity standards.

A Precautionary Move with Broader Intent

Saudi Arabia's decision is officially framed as a safeguard against animal diseases. However, the wide scope of the ban—covering multiple countries, including those with advanced poultry industries—suggests that the move may also be influenced by broader objectives. These include strengthening domestic poultry production, reducing dependency on imports, and reshaping market dynamics in favor of local producers.

Industry experts believe such policies often combine sanitary concerns with economic strategy. Rather than targeting specific outbreaks, they reflect a proactive approach to securing national food systems and ensuring long-term self-sufficiency.

Limited Immediate Impact on India

Despite the scale of the announcement, its direct impact on India's poultry sector is expected to be minimal. According to Suresh Chitturi, Managing Director of Srinivasa Farms and First Asian Chair of the World Egg Organization, India's exports to Saudi Arabia have historically been negligible compared to its overall production and other export destinations.

Similarly, Ricky Thaper, Joint Secretary of the Poultry Federation of India, emphasized that the restriction is unlikely to disrupt India's poultry trade in any significant way. The country's exports to Saudi Arabia form only a small fraction of its total output, while domestic consumption continues to grow steadily.

India exports roughly 10 million eggs daily to Middle Eastern markets, primarily from Namakkal in Tamil Nadu. However, Saudi Arabia has not been a major destination within this trade flow. As a result, the ban does not significantly affect existing supply chains.

Strength of India's Poultry Sector

India's poultry industry remains robust and continues to expand at a steady pace. The sector is valued at approximately USD 30 billion and provides employment to around 6 million people, both directly and indirectly. Its scale and diversity provide a strong cushion against external shocks such as import restrictions.

Key industry statistics highlight this strength:

- Annual egg production: 142.6 billion eggs
- Broiler population: 5.5 billion birds per year
- Layer population: 350 million birds
- Backyard poultry: 40 million birds
- Growth rate: 7–8% annually

India is also recognized as one of the largest egg producers globally, with increasing domestic consumption—currently averaging 106 eggs per capita annually—further supporting the sector's growth.

A Strategic Signal for the Future

While the immediate commercial impact may be limited, industry leaders stress that the ban carries deeper strategic implications. It serves as a reminder that globa

l poultry trade is increasingly influenced by biosecurity standards, regulatory confidence, and national policies aimed at self-reliance.

Suresh Chitturi described the development as "not a disruption, but an important signal." He emphasized that India should focus on long-term gains rather than short-term losses. The key lies in strengthening systems that enhance credibility and trust in international markets.

Biosecurity as a Competitive Advantage

One of the most important takeaways from this development is the growing importance of biosecurity. Industry experts argue that biosecurity should not be treated merely as a regulatory requirement but as a strategic asset that can define India's position in global markets.

Developing a robust, transparent, and auditable farm-to-fork biosecurity system could significantly enhance India's export potential. Such systems would assure importing countries, retailers, and global food chains that Indian poultry products are safe, traceable, and produced under strict quality controls.

Importance of Zoning and Compartmentalization

To strengthen its export capabilities, India must also focus on implementing effective zoning and compartmentalization strategies. These approaches ensure that disease outbreaks remain localized and do not impact the entire country's trade reputation.

- Zoning: Restricting disease control measures to specific geographic areas
- Compartmentalization: Certifying disease-free production systems within defined operations

By adopting these measures, India can maintain export continuity even during localized disease events, thereby improving its reliability as a global supplier.

Turning a Challenge into Opportunity

Rather than viewing the Saudi ban as a setback, industry leaders see it as an opportunity for India to reposition itself. Aligning industry practices, regulatory frameworks, and diplomatic efforts can help transform such challenges into catalysts for growth.

There is also significant potential in exploring new markets and strengthening existing ones. As global demand for poultry products continues to rise, countries that demonstrate strong biosecurity and regulatory compliance will have a competitive edge.

Evolving Global Poultry Landscape

The global poultry industry is undergoing a shift, with increasing emphasis on:

- Food safety and disease prevention
- Supply chain transparency
- Sustainability and environmental responsibility
- National self-sufficiency in food production

In this evolving environment, resilience and credibility are becoming as important as production capacity.

Conclusion

Saudi Arabia's import ban on poultry and eggs from multiple countries, including India, may not have an immediate economic impact on India's poultry sector. However, it sends a clear message about the future direction of global trade in animal products.

For India, this moment represents a strategic inflection point. By investing in biosecurity, adopting advanced disease control measures, and building a strong export framework, the country can unlock significant opportunities in the global poultry market.

Ultimately, the ability to demonstrate reliability, safety, and quality will determine India's success in expanding its poultry exports. What may appear as a restriction today could, in fact, become a stepping stone toward a more competitive and resilient future for the industry.

TRADER JOE'S RECALLS 10 MILLION MORE POUNDS OF FROZEN FOOD IN 43 STATES

A major food safety alert has been issued in the United States as Trader Joe's expands its recall of frozen food items across the country. The recall, which now affects more than 40 states, involves millions of pounds of products including fried rice, ramen, and dumplings. This large-scale action follows concerns raised by federal food safety authorities regarding potential contamination in these widely distributed items.

The recall process began earlier this year when Ajinomoto Foods North America Inc., a leading supplier of frozen food products, voluntarily withdrew over three million pounds of frozen chicken fried rice products from the market in February 2026. This initial recall was carried out in coordination with the Food Safety and Inspection Service (FSIS), which operates under the United States Department of Agriculture (USDA) and is responsible for ensuring the safety of meat, poultry, and processed egg products.

As investigations progressed, the scope of the issue became more extensive. On March 3, the recall was significantly expanded to include an additional 33 million pounds of various frozen items. These included both ready-to-eat and not-ready-to-eat products such as chicken and pork fried rice, ramen dishes, and shu mai dumplings. The expansion reflected a precautionary approach, as authorities aimed to prevent any potential health risks associated with the affected products.

The situation escalated further by March 20, when nearly 10 million more pounds of frozen food were added to the recall list. This latest update was shared by the Food and Drug Administration (FDA), highlighting the seriousness and evolving nature of the issue. With this addition, the total volume of recalled products reached tens of millions of pounds, making it one of the most significant frozen food recalls in recent times.

The recall includes a variety of popular frozen items sold at Trader Joe's outlets nationwide. Among the products initially affected in February were "Ajinomoto Yakitori Chicken with Japanese-Style Fried Rice" and "Trader Joe's Chicken Fried Rice." These products were sold in different packaging formats, including large cardboard boxes containing multiple bags and individual plastic bag packages. The affected items carried best-before dates ranging from September to November 2026 and were produced between September 8 and November 17, 2025. All recalled packages were marked with the establishment number P-18356 within the USDA inspection seal, allowing consumers and retailers to identify the impacted batches.

While the Ajinomoto-branded products were distributed internationally, including exports to Canada, the Trader Joe's branded items were sold exclusively in stores across the United States. This widespread distribution significantly increased the potential reach of the affected products.

In early March, Trader Joe's issued its own advisory notice, stating that it was recalling additional frozen food products "out of an abundance of caution.

" This move expanded the list to include several more items such as Chicken Fried Rice, Vegetable Fried Rice, Japanese-Style Fried Rice, and Chicken Shu Mai dumplings. These products had a wide range of best-by dates extending from early 2026 into early 2027, indicating that the recall could impact items already purchased and stored by consumers for future use.

The March 20 update from the FDA introduced further details about the additional products being recalled. One notable item was Trader Joe's Vegetable Fried Rice, identified by specific product and case codes. These products were packaged in bulk cases containing multiple one-pound bags and were distributed extensively across the country. The FDA confirmed that the affected products had been shipped to numerous states, including major markets such as California, Texas, New York, Florida, Illinois, and Pennsylvania, as well as smaller states like Wyoming, Rhode Island, and New Hampshire. In total, 43 states were impacted by the recall, underscoring the nationwide scale of the issue.

The primary reason behind this extensive recall is the potential contamination of food products with glass fragments. According to the FSIS, the problem was first identified after four consumers reported discovering pieces of glass in the frozen food items. Although no injuries have been officially reported so far, the presence of foreign materials such as glass poses a serious risk to consumer safety, including the possibility of cuts, internal injuries, or choking hazards.

Food safety authorities have taken a cautious approach by expanding the recall to include all potentially affected products, even those that have not yet been directly linked to contamination incidents. This proactive strategy is aimed at minimizing risks and maintaining consumer trust.

Consumers who have purchased any of the recalled products are strongly advised not to consume them. Instead, they should either dispose of the items safely or return them to the place of purchase for a full refund. Retailers have also been instructed to remove all affected products from store shelves and storage facilities to prevent further sales.

This incident highlights the importance of robust food safety systems and the role of regulatory agencies in protecting public health. Both the FSIS and FDA continue to monitor the situation closely, working in collaboration with manufacturers and retailers to ensure that all contaminated products are effectively removed from circulation.

For Trader Joe's, the recall represents a significant operational and reputational challenge, given its popularity and strong customer base. However, the company's decision to act swiftly and transparently reflects its commitment to consumer safety.

In conclusion, the ongoing recall of frozen food products linked to Trader Joe's and Ajinomoto Foods North America serves as a critical reminder of the complexities involved in food production and distribution. While no injuries have been reported, the potential presence of glass contamination has prompted one of the largest recalls in recent years. Continued vigilance, prompt action, and cooperation between regulatory bodies, manufacturers, and consumers will be essential in resolving the situation and preventing similar incidents in the future.

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Improvement in BWT in EC shed

Upto **30%**

Improvement in livability vis-à-vis antibiotic control

#1 FCR point represent third/last decimal point of 1000

*Majority of field trials were conducted at same farm with multiple sheds in integrations across various geographical locations and at different time of the year. Some of the integrators were generous in sharing complete production indices while others communicated the summary of the trial results. In the field trials, Improval™ MS was compared with antibiotic/probiotic/antibiotic + probiotic/probiotic + prebiotic control. Detailed reports availble on request.

Editorial Calendar 2026

Publishing Month:
January
Article Deadline :
18th, Dec. 2025
Advertising Deadline:
20th, Dec.2025
Focus :
Opportunities and Challenges

Publishing Month:
February
Article Deadline :
18th, Jan. 2026
Advertising Deadline:
20th, Jan.2026
Focus :
Budget

Publishing Month:
March
Article Deadline :
18th, Feb. 2026
Advertising Deadline:
20th, Feb.2026
Focus :
Disease Prevention

Publishing Month:
April
Article Deadline :
18th, March 2026
Advertising Deadline:
20th, March 2026
Focus :
Summer Stress Management

Publishing Month:
May
Article Deadline :
18th, April 2026
Advertising Deadline:
20th, April 2026
Focus :
Cold Chain

Publishing Month:
June
Article Deadline :
18th, May 2026
Advertising Deadline:
20th, May 2026
Focus :
Nutrition

Publishing Month:
July
Article Deadline :
18th, June 2026
Advertising Deadline:
20th, June 2026
Focus :
Biosecurity

Publishing Month:
August
Article Deadline :
18th, July 2026
Advertising Deadline:
20th, July 2026
Focus :
Sustainability

Publishing Month:
September
Article Deadline :
18th, August 2026
Advertising Deadline:
20th, August 2026
Focus :
Egg Production & Processing

Publishing Month:
October
Article Deadline :
18th, September 2026
Advertising Deadline:
20th, September 2026
Focus :
Processing & Packaging

Publishing Month:
November
Article Deadline :
18th, October 2026
Advertising Deadline:
20th, October 2026
Focus :
Winter Stress

Publishing Month:
December
Article Deadline :
18th, November 2026
Advertising Deadline:
20th, November 2026
Focus :
Food Safety

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 : _____

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: CNRBINBBBFD | PAN No. AAMCP6787A

For more detail, contact:

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

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 (INR)	Single Issue (USD)		Advertisement Type	Single Issue (INR)	Single Issue (USD)		Advertisement Type	Single Issue (INR)	Single Issue (USD)	
Front Cover	30,000	500	☐	Back Cover	20,000	300	☐	Centre Spread	25,000	400	☐
Front Gate Fold 1A	25,000	400	☐	Back Gate Fold 1A	20,000	300	☐	Full Page Random	10,000	200	☐
Front Gate Fold 2A	25,000	400	☐	Back Gate Fold 2A	20,000	300	☐	Up to Page 9	15,000	250	☐
Front Inside	20,000	300	☐	Back Inside	18,000	275	☐				
Front Opening	20,000	300	☐	Back Opening	18,000	275	☐				

EGG DAILY AND MONTHLY PRICES OF MARCH 2026

Name Of Zone / Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
NECC SUGGESTED EGG PRICES																																
Ahmedabad	490	490	490	480	470	470	440	425	425	425	430	435	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	-	-	-	-	447.04
Ajmer	435	435	435	420	405	385	375	375	375	380	395	395	395	375	370	380	375	375	375	375	380	385	390	380	370	377	377	-	-	-	-	388.48
Barwala	448	425	420	420	420	385	385	385	385	387	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392	-	-	-	-	397.19
Bengaluru (CC)	530	510	510	480	480	480	480	480	460	460	460	470	480	480	480	485	485	485	485	485	485	485	465	465	445	445	425	-	-	-	-	477.04
Brahmapur (OD)	475	475	445	445	435	435	415	415	415	416	425	425	425	425	430	430	430	430	430	430	435	435	437	425	415	415	405	-	-	-	-	430.30
Chennai (CC)	520	500	500	480	460	450	450	450	450	450	450	475	495	495	495	495	495	505	505	505	505	505	485	465	465	440	440	-	-	-	-	478.89
Chittoor	513	493	493	473	453	443	443	443	443	443	443	468	488	488	488	488	488	498	498	498	498	498	478	458	458	433	433	-	-	-	-	471.89
Delhi (CC)	475	475	475	475	475	450	450	430	430	430	430	430	430	415	415	415	415	415	415	415	415	415	415	415	415	415	415	-	-	-	-	432.04
E.Godavari	458	458	440	440	425	425	425	425	395	400	410	410	410	410	410	410	415	415	415	415	415	415	415	415	395	395	380	-	-	-	-	416.33
Hospet	470	450	450	420	420	420	420	420	400	400	400	410	420	420	420	425	425	425	425	425	425	425	405	405	385	385	365	-	-	-	-	417.04
Hyderabad	450	450	450	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420	400	400	380	380	380	-	-	-	-	417.41
Jabalpur	490	470	460	450	450	425	405	395	395	395	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	-	-	-	-	415.56
Kolkata (WB)	530	530	510	510	490	490	490	470	470	475	480	480	485	485	485	485	495	495	495	495	495	495	495	470	470	460	460	-	-	-	-	488.52
Ludhiana	450	450	450	421	421	410	380	380	380	380	390	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392	392	-	-	-	-	399.41
Mumbai (CC)	535	525	510	500	490	480	465	450	450	450	460	470	475	480	480	480	480	480	480	480	480	480	470	465	455	445	435	-	-	-	-	475.93
Mysuru	530	510	510	480	480	480	480	480	460	460	460	470	485	485	485	490	490	490	490	490	490	490	470	470	447	447	425	-	-	-	-	479.41
Namakkal	480	460	460	430	430	430	430	430	430	430	430	435	435	435	435	440	440	445	445	445	445	445	425	425	405	405	385	-	-	-	-	434.44
Pune	535	525	515	505	495	485	475	465	455	455	455	465	470	475	475	475	475	475	475	475	475	475	470	465	455	445	435	-	-	-	-	475.74
Raipur	455	456	455	435	435	415	410	400	400	405	415	415	415	415	415	415	415	415	415	415	415	415	415	415	400	400	390	-	-	-	-	417.26
Surat	510	510	500	485	470	470	450	435	435	435	435	440	445	450	450	450	450	450	450	450	450	450	440	440	440	440	440	-	-	-	-	454.44
Vijayawada	500	500	475	450	425	425	400	410	410	410	425	425	435	440	445	445	445	445	445	445	445	445	430	420	415	395	395	380	-	-	-	432.59
Vizag	465	465	445	445	420	420	420	420	400	405	410	410	410	410	410	410	415	415	415	415	415	415	415	415	400	400	400	-	-	-	-	417.96
W.Godavari	458	458	440	440	425	425	425	425	395	400	410	410	410	410	410	410	415	415	415	415	415	415	415	415	395	395	380	-	-	-	-	416.33
Warangal	452	452	452	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	422	402	402	382	382	382	-	-	-	-	419.41
Prevailing Prices																																
Allahabad (CC)	514	505	495	495	495	476	452	452	452	452	457	457	457	457	448	443	443	443	443	443	443	443	443	443	443	433	433	-	-	-	-	457.78
Bhopal	475	470	460	450	450	425	410	410	405	405	415	415	415	415	415	415	415	415	415	415	415	415	415	415	405	405	405	-	-	-	-	421.67
Indore (CC)	480	470	470	470	430	420	410	410	410	415	425	425	425	410	400	410	405	405	405	405	410	410	420	410	400	405	-	-	-	-	-	421.35
Kanpur (CC)	500	486	471	471	471	452	438	438	438	438	452	452	452	452	452	438	438	438	438	438	429	429	429	429	429	429	429	-	-	-	-	446.52
Luknow (CC)	524	510	495	495	495	476	462	462	462	462	476	476	476	476	476	457	457	457	457	448	443	438	438	438	438	438	438	-	-	-	-	465.56
Muzaffurpur (CC)	505	505	490	490	480	450	450	450	450	455	455	455	450	445	440	440	440	440	440	440	440	440	445	445	440	440	-	-	-	-	-	454.62
Nagpur	510	510	490	470	460	440	440	420	420	420	420	425	435	435	435	435	425	425	425	425	425	425	425	425	410	400	400	-	-	-	-	436.11
Patna	505	505	490	490	480	450	450	450	450	455	455	455	450	445	440	440	440	440	440	440	440	440	445	445	440	440	-	-	-	-	-	454.62
Ranchi (CC)	581	514	514	514	500	500	500	457	457	457	457	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	428	-	-	-	-	468.85
Varanasi (CC)	500	500	487	487	483	467	450	450	450	450	453	452	453	443	433	433	433	433	433	433	433	433	433	433	433	433	433	-	-	-	-	450.15

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