MONTHLY BILINGUAL INR 300/-

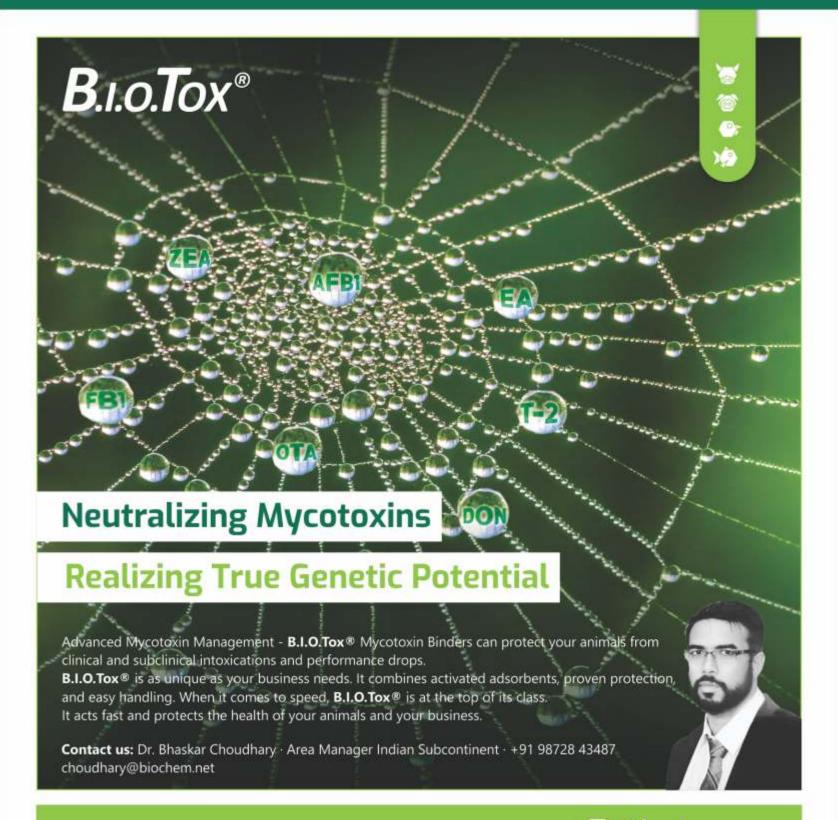
POULTRY PLANNER

R.N.I. 71668/1999

JANUARY 2024

Title Code HARBIL00563

Vol. 26 | No. 01 | January - 2024









Poultry Planner CREATE • CONNECT • CONQUER Dairy Planner

Monthly Magazine

THE NEW STANDARD

IN DEVELOPING TODAY'S BUSINESS

Advertise with us

Today

See your business

Growing

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

ADVERTISEMENTS MARKET REVIEW INDUSTRY UPDATES

LATEST NEWS

www.pixie.co.in

+91 9991705007

www.facebook.com/poultryplanner123

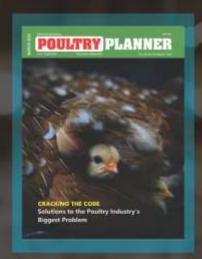
www.facebook.com/dairyplanner123

m www.linkedin.com/company/poultry-planner

www.linkedin.com/company/dairy-planner

With Over 35,000+ Readership

Boost YOUR BRAND VISIBILITY with us in f 🕓





Monthly Magazine's

PARTICIPATED **EXHIBITION**

ARTICLES

PRESS RELEASE

CSR's

Pixie Expomedia Pvt. Ltd.

C/o OmAng Hotel, Namaste Chowk, Near Janta Petrol Pump, KARNAL - 132001 (Haryana) INDIA Email: poultry.pcsl@gmail.com, dairy.pcsl@gmail.com Website: www.pixie.co.in

Marketing Division: +91 9991705007 / 741 999 3001





VENKATESHWARA B.V. BIOCORP PRIVATE LIMITED

(An ISO 9001:2015, OHSAS 18001:2007 & GMP Certified Company)
Venkateshwara House', S. No. 114/A/2, Pune-Sinhagad Road, Pune-411030
Tel.: (020) 24251803, Fax: +91-20-24251060/24251077, Website: www.venkateshwarabvbiocorp.com





Covering Feed, Pharmaceuticals and Equipment Sector

Concurrent Events





08-10 August 2024

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

EVENT HIGHLIGHTS











A participation at TPEX becomes the most apt marketing solution to generate sales leads, launch a new product, brand your enterprise, Network with existing and potential customers, Benchmark against competition, Enter new markets and Attract new Partnerships



ROSS 308 AP DELIVERS FOR ASHU BREEDING FARM

"For Ashu Breeding Farm, the proof is in the results, and the Ross" 308 AP comes through for us each time. The support from Aviagen India, and hard work of our own team, helps us maximize the excellent genetics."

MR. MOHAN GADA

Managing Director of Ashu Breeding Farm

ASHU BREEDING FARM We focus on business sustainability goals by supplying the best-quality products to our customers.

SUCCESSFUL
FARMERS in India
CHOOSE the Ross 308 AP for:

1.5 to 2 points of FCR improvement annually

Average 10 - 15 more chicks per hen than the competition

 High meat yield and excellent meat quality

To learn more, visit our website at https://ap.aviagen.com or follow the QR Code below.





Aviagen India Poultry Breeding Company Private Limited +91 4252 233 650 info@aviagen.com

www.aviagen.com







From the Editor's Desk

Navigating the Future of India's Poultry Industry through Opportunities and Challenges

The poultry industry in India is at a crucial point in 2024, with significant growth potential but also facing challenges. The demand for poultry products is increasing due to a growing population and changing dietary preferences. However, the industry is also being shaped by technological advancements, sustainability concerns, and policy dynamics.

Technological innovations are revolutionizing poultry farming practices. Precision nutrition, genetic engineering, and automated monitoring systems are improving efficiency and sustainability. Vertical integration, where companies control multiple stages of the supply chain, is becoming more common, leading to better quality control and cost optimization. Biosecurity measures are also advancing to prevent disease outbreaks and protect animal welfare and public health.

Sustainability imperatives are reshaping the industry. Consumers are increasingly concerned about the environmental impact of their food choices, leading to a demand for ethically produced and environmentally sustainable poultry products. Companies that embrace sustainability initiatives are likely to gain a competitive advantage and build consumer trust. This includes sustainable sourcing practices, waste reduction, and renewable energy adoption.

However, the industry also faces challenges. Disease management is a significant concern, with avian influenza outbreaks posing risks to poultry production and public health. Strengthening biosecurity measures, improving surveillance systems, and implementing effective vaccination strategies are crucial to mitigate these risks.

Regulatory dynamics and policy interventions play a crucial role in shaping the industry. Government policies on import regulations, subsidies, and animal welfare standards have a significant impact on market dynamics. Trade dynamics and geopolitical tensions can also affect the poultry industry, impacting supply chains and market access. Industry stakeholders must navigate a complex regulatory environment and engage with policymakers to create a favorable business environment.

The socio-economic impact of the poultry industry is also important. Poultry farming provides livelihood opportunities for millions of farmers, particularly in rural areas. Ensuring equitable distribution of benefits and addressing concerns related to farmer welfare, labor rights, and animal welfare is crucial. Collaboration between industry players, policymakers, and civil society is necessary to promote inclusive growth and address socioeconomic disparities within the sector.

In conclusion, the future of India's poultry industry in 2024 is characterized by opportunities and challenges. Technological advancements, sustainability concerns, and policy dynamics will shape the industry's trajectory. Embracing innovation, enhancing sustainability practices, and fostering collaborative partnerships will be key to unlocking the industry's potential and ensuring its long-term viability. Proactive measures and strategic foresight are essential to harness the opportunities that lie ahead. Known brute



Bhavana Gupta

Parth Rai Gupta Co-Editor

Prince



Vishal Rai Gupta **Managing Director** vishal@pixie.co.in

HONORARY EDITORIAL BOARD MEMBERS

Dr. Sekhar Sushil Basak

Innovista Consulting, New Delhi

Mr. G.K. Rathinam

Palani Tk, Dindugul Dist, Tamil Nadu Dr. Manisha Singodia

Dr. Mohit Bharadwaj

(Phd Scholar, Pantnagar)

Dr. SS Rathore

(MVSc Poultry Science IVRI,

Izatnagar)

(MVSc Veterinary Science,

Jaipur)

Dr. Annada Das

(Ph. D Scholar, WBUAFS, Kolkata)

Dr. B.L. Saini

(Ph.D IVRI, Izatnagar)

Dr. Bilawal Singh

(MVSc, Assistant Professor Ludhiana)

- Editorial Policy is independent. Views expressed by authors are not necessarily held by the editors.
- Registered as Newspaper by Registrar of Newspaper for India: RNI No. 71668/1999, Tittle Code HARBIL00563
 Editorial & Advertisement may not be reproduced without the written consent of the publishers. Whilst every care is taken to ensure the accuracy of the contents of Poultry Planner the publishers do not accept any responsibility or liability for the material herein

- The submitted material will not be returned.
- Published at : Anand Vihar, near gogripur railway crossing, hansi road, karnal-132001 (Haryana) Editor-in-Chief : Mrs. Bhavana Gupta
- All Legal matters are subject to karnal jurisdiction

% Coxam® 25%



Huvepharma N.V.
Uitbreidingstraat 80 • 2600 Antwerp • Belgium P +32 3 288 1849 • F +32 3 289 7845 customerservice@huvepharma.com



Huvepharma SEA (Pune) Pvt. Ltd. 42, 'Haridwar', Road 2 A/B Kalyani Nagar, Pune 411006, India P +91 20 2665 4193 F +91 20 2665 5973 salesindia@huvepharma.com



Advertisement

A	Aviagen	05
В¬	Biochem	Front Cover
	Biosint	17
	Biosint	49
	B.V. Bio-Corp Pvt. Ltd.	Front Openir
G ₹	Gupta Agro Industries	Back Openin
н¬	Huvepharma	07
٦,	Indian Herbs	09
N¬	Natural Herbs	19
P⊸	Pixie Expomedia Pvt. Ltd.	Front Inside
s ¬	Sapience Agribusiness Consulting LLP	25
T ¬	The Poultry Expo	04
	The Poultry Expo	Back Tittle
U¬	Uttara Impex Pvt. Ltd.	15
	Uttara Impex Pvt. Ltd.	23
٧٦	Vaksindo Animal Health Pvt. Ltd.	11
	Venky's	Back Inside
	Ventri Biologicals	21
Z٦	Zenex	29
	7eus	47

Features

- 06 Editorial
- **08** Advertisement Index
- 10 Content

Press Release

26 Union Minister of Fisheries, Animal Husbandry, and Dairying Shri Parshottam Rupala inaugurates ...



27 Secretary, Department of Animal Husbandry and Dairying chairs roundtable meeting with leading Poultry Exporters to boost Indian poultry exports ...

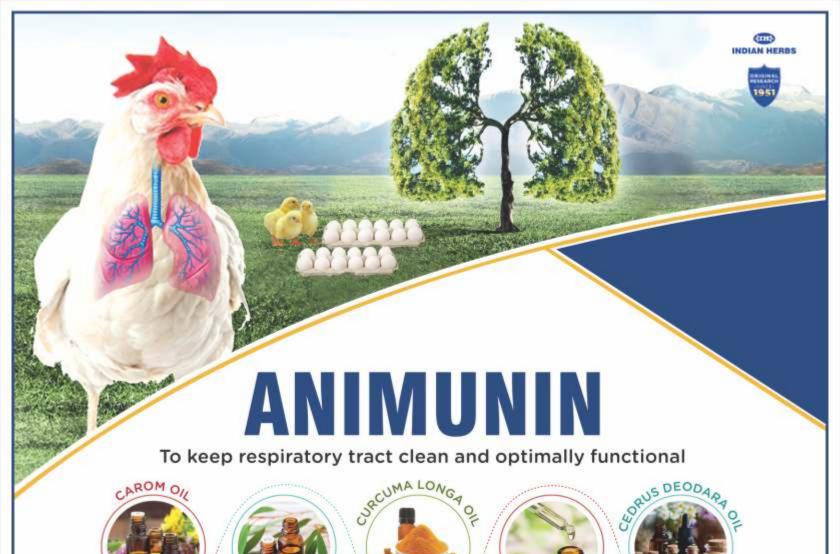


Ceah Organises a Special Programme for Nabard Officers Across India



PVS Group India Demonstrated a Leading
Presence in "ACHAB International
Expo 2023" at Dhaka, Bangladesh







USAGE REGIMEN

Animunin Powder: 750g - 1kg per ton of feed.

CALYPTUS

Animunin Liquid

Broilers	Layers	Quantity (For 100 Birds/day)	
0-2 Weeks	0-8 Weeks	10 ml	
3-4 Weeks	9-20 Weeks	20 ml	
5-6 Weeks	21-72 Weeks	40 ml	

- To be given regularly in broilers, layer-chicks and growers.
- In layers to be given regularly or 15 days every month, as required.
- Double quantity is recommended for breeders & during challenging conditions (for first 10 days).

ANIMUNIN POWDER

CANCTURA SANCTURA

A natural alternate to conventional antibiotic (Tiamulin, Tylosin, CTC) for prevention of respiratory diseases

ANIMUNIN LIQUID

As an adjuvent alongwith conventional antibiotics for treatment of CRD/ respiratory infections

PRESENTATION

Powder: 10 kg & 25 kg Liquid: 1 Ltr & 5 Ltr



FOR PREVENTION & MANAGEMENT OF RESPIRATORY BACTERIAL, VIRAL AND MYCOPLASMAL OUTBREAKS IN POULTRY

INDIAN HERBS SPECIALITIES Pvt. Ltd.

C-215, 2nd Floor, Elante Offices, Plot No. 178-178A, Industrial & Business Park, Phase - 1 CHANDIGARH (U.T.) - 160002, Ph. No. 0172 - 5011470, 4181014, +91 9023247217 E-mail ; ihspl@indianherbs.org, Website: www.indianherbs.org



Article

12 Navigating the Feathers: Opportunities and Challenges for the Indian Poultry Industry in 2024

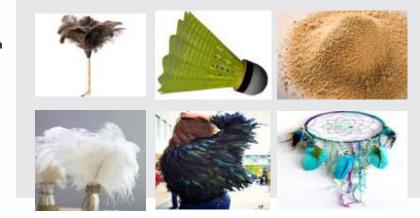
Siddhi Gupta

Feather it's way of Processing & Utilization

Dr Nazir Ahmed, Dr Ajaz A Dar, Dr Mir Rovida
and Dr Malik Raies Ul Islam

24 Efficacy amprolium re-confirmed Ben Dehaeck, DVM





Departments

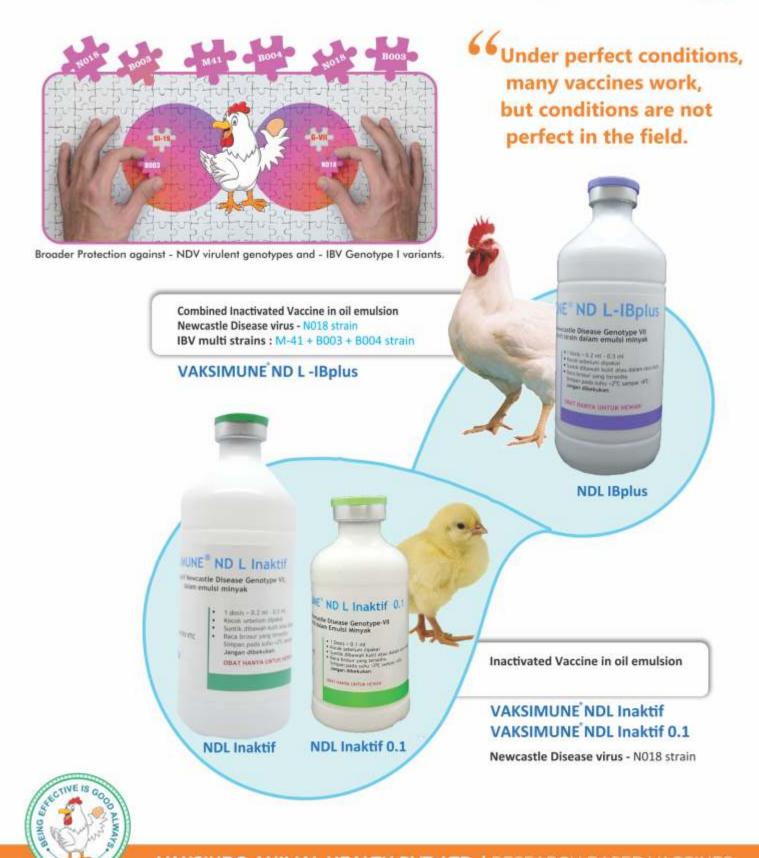
- 35 News 48 Subscription Form
- 37 Egg Prices 48 Editorial Calendar











VAKSINDO ANIMAL HEALTH PVT. LTD. | RESEARCH BASED VACCINES



Navigating the Feathers: Opportunities and Challenges for the Indian Poultry Industry in 2024

Siddhi Gupta Co-Editor

The Indian poultry industry stands at a crossroads in 2024, poised for growth yet facing several challenges that demand strategic navigation. With a rapidly expanding population and evolving dietary preferences, the demand for poultry products continues to surge. However, the sector grapples with various hurdles ranging from disease outbreaks to regulatory complexities. In this article we explore the opportunities and challenges shaping the trajectory of the Indian poultry industry in 2024.

Rising Demand: India's population growth, urbanization, and increasing disposable incomes have led to a significant rise in the demand for poultry products. Poultry is a relatively affordable source of protein, making it an attractive choice for consumers seeking a balanced diet. Urbanization and lifestyle changes are also driving this demand, as urban dwellers prefer convenient and protein-rich food options. Health consciousness is growing, leading to healthier food choices, with poultry products aligning with health-conscious individuals' preferences due to their high-quality protein content and lower saturated fat levels.

Poultry has long been a staple in Indian cuisine, with dishes like tandoori chicken, butter chicken, and egg curry being popular across the country. As we undergo a dietary transition from traditional plant-based diets to increased animal protein consumption, poultry serves as a bridge between these dietary patterns. Poultry products are perceived to offer various health benefits beyond protein provision, such as vitamins, minerals, and antioxidants. Lean cuts of poultry meat are

associated with weight management, muscle building, and overall well-being.

Culinary diversity is another factor contributing to the rising demand for poultry products. The versatility of poultry products allows for a wide range of culinary preparations, catering to diverse tastes and preferences across different regions of India. To meet this demand, industry stakeholders must adapt and innovate, ensuring the availability of high-quality, safe, and sustainably produced poultry products to meet the diverse needs of consumers across the country.

Changing Dietary Patterns: The increasing health consciousness and demand for protein-rich diets are driving a shift towards poultry consumption. This trend is driven by factors such as awareness about the nutritional benefits of poultry meat, convenience, and versatility in cooking.

Health conscious consumers are increasingly seeking healthier alternatives to red meat, with poultry products like lean chicken and eggs being viewed favorably due to their high protein content, lower saturated fats, and essential vitamins and minerals. Protein-rich diets are also becoming more popular, with people recognizing the importance of protein in maintaining overall health and fitness. Poultry products, particularly chicken and eggs, are valued for their high-quality protein content and are considered convenient options for meeting daily protein requirements.

Weight management is another growing trend, with many individuals seeking ways to control their calorie intake while ensuring adequate protein intake. Poultry products, especially lean cuts of chicken breast and egg whites,

are often recommended as part of balanced, calorie-controlled diets aimed at promoting weight loss and maintenance.

Flexitarian and plant-based trends are also influencing the Indian food landscape. Flexitarians, who primarily follow a vegetarian diet but occasionally consume meat or poultry products, are finding poultry as a versatile and adaptable protein source.

Convenience and versatility in meal preparation make poultry products attractive options for busy individuals and families. Chicken and eggs can be cooked in various ways, creating a wide range of flavorful dishes.

Cultural acceptance and culinary fusion are also significant factors in the Indian food landscape. As dietary preferences continue to evolve, the poultry industry must innovate and adapt to capitalize on emerging opportunities in the dynamic food landscape.

Technological Advancements: The Indian poultry industry is experiencing significant technological advancements, transforming its operations and management. Automation and robotics are revolutionizing poultry farming by streamlining repetitive tasks and improving operational efficiency. Robotic solutions, such as automated vaccination systems and poultry health monitoring devices, enhance animal welfare and disease management practices.

The Internet of Things (IoT) enables real-time monitoring and data collection from poultry farms, allowing farmers to remotely track various parameters such as temperature, humidity, feed consumption, water usage, and animal behavior. Advanced sensors and IoT devices provide valuable insights into flock health, performance, and environmental conditions, enabling proactive decisionmaking and preventive measures.

Precision breeding and genetics are driven by advances in genetics, genomics, and biotechnology. Genetic selection tools and genomic technologies enable breeders to accelerate the breeding process, identify superior genetic lines, and enhance the genetic potential of

poultry stocks. Vertical integration models and smart farming practices integrate technology throughout the poultry value chain, ensuring quality control, biosecurity, and regulatory compliance.

Nutrition and feed management innovations are enhancing the efficiency of feed conversion, nutrient utilization, and animal health in poultry production. Nutrigenomics and precision nutrition technologies tailor feed formulations to meet the specific dietary requirements of different poultry species, ages, and production stages. Digital feed management systems and precision feeding technologies optimize feed delivery, rationing, and monitoring to minimize wastage.

Technological health monitoring and disease management tools empower poultry farmers to monitor flock health, detect early signs of disease outbreaks, and implement timely interventions to control infectious diseases and maintain biosecurity. Remote sensing devices, wearable sensors, and diagnostic kits enable rapid detection of pathogens, monitoring of immune responses, and surveillance of disease transmission dynamics.

Technological advancements are driving transformative changes in the Indian poultry industry, enhancing competitiveness, sustainability, and resilience in the face of evolving challenges and opportunities.

Export Potential: India has the potential to become a significant player in the global poultry market due to its abundant feed resources, competitive production costs, and favorable market dynamics. The country's strategic location in South Asia positions it as a trade partner and supplier of poultry products to neighboring countries in the Middle East, Southeast Asia, and Africa.

India's abundant feed resources, such as maize, soybean meal, and oilseed cakes, provide a competitive edge in terms of feed affordability and supply chain efficiency. The country also benefits from lower production costs compared to other poultry-producing countries due to favorable climatic conditions, abundant labor supply, and

economies of scale in production. This lower labor costs and overhead expenses make poultry products attractive to international buyers seeking cost-effective protein sources.

The commitment to quality assurance and certification ensures compliance with global standards and enhances the credibility and marketability of poultry products. The industry offers a diverse range of products, catering to evolving consumer preferences and demand for convenience.

The rising global demand for proteinrich foods, changing dietary patterns, and population growth drive the demand for poultry products worldwide. India's ability to supply competitively priced poultry products to emerging markets with growing populations and expanding middleclass demographics presents opportunities for export-led growth and market expansion in regions experiencing rising urbanization and income levels.

Government Initiatives: The government has implemented various initiatives to support the growth of the poultry industry. These include the National Livestock Mission (NLM), which aims to enhance livestock productivity, improve breed quality, strengthen animal healthcare services, and promote value addition and market linkages in the poultry value chain.

Poultry Development Schemes are implemented at the national, state, and district levels, providing financial assistance, subsidies, training, and technical guidance to poultry farmers for establishing modern poultry farms, hatcheries, and processing units. These schemes also provide input subsidies, breed improvement, and disease control measures.

Food Safety and Quality Regulations are enforced by the Food Safety and Standards Authority of India (FSSAI), which ensures compliance with food safety regulations through inspection, certification, and licensing of poultry farms, processing plants, and retail outlets. Research and Development Support is undertaken by government agencies, research institutions, and universities to address key challenges and opportunities in the poultry sector.

Export Promotion and Market Access are promoted through export promotion councils, trade fairs, buyerseller meets, and market development initiatives to facilitate market access, brand promotion, and export competitiveness. Capacity Building and Training programs are conducted for poultry farmers, entrepreneurs, veterinarians, and extension workers to build capacity, impart technical knowledge, and disseminate best practices in poultry production, management, and marketing.

Animal Welfare and Ethical Standards are also emphasized through the Prevention of Cruelty to Animals Act, 1960, and the Animal Welfare Board of India (AWBI). Regulations govern humane handling, transportation, and slaughter practices to ensure the welfare of poultry birds and compliance with ethical norms and international standards.

The government's initiatives play a crucial role in supporting the growth, sustainability, and competitiveness of the poultry industry. By fostering an enabling ecosystem for poultry farming, the government aims to promote food security, rural livelihoods, and economic growth while ensuring safe, nutritious, and affordable poultry products for consumers.

Disease Outbreaks: The poultry industry faces significant challenges due to disease outbreaks such as avian influenza and Newcastle disease, which can cause economic losses and disrupt supply chains. Factors contributing to these risks include high population densities, intensive production systems, global trade, and environmental factors.

Avian influenza, particularly strains H5N1, H5N8, and H9N2, poses a recurring threat to the industry, leading to high mortality rates, trade restrictions, and culling of infected birds. Control measures such as surveillance, biosecurity protocols, vaccination, and prompt reporting are essential to mitigate the spread of avian influenza.

Newcastle disease, another highly contagious viral infection, affects poultry worldwide, causing respiratory, digestive, and nervous system symptoms in infected birds.

Vaccination, biosecurity measures, and strict control of movement and trade are critical for preventing and controlling Newcastle disease outbreaks. Infectious bursal disease (Gumboro) affects young chickens, causing immunosuppression and increased susceptibility to secondary infections. Control measures such as biosecurity protocols, hygiene practices, vaccination, and monitoring of feed and water quality are essential for preventing Salmonella infections in poultry farms.

Biosecurity challenges include inadequate infrastructure, poor hygiene practices, uncontrolled movement of people, vehicles, and equipment, and lack of awareness and compliance with biosecurity protocols. Education, training, and enforcement of biosecurity measures are crucial for minimizing biosecurity risks and protecting poultry health.

Global trade and transboundary diseases also pose challenges for the poultry industry, requiring enhanced surveillance, quarantine measures, and risk assessment protocols.

Strengthening veterinary infrastructure, capacity building, and public-private partnerships are essential for safeguarding poultry health, ensuring food safety, and sustaining the growth and competitiveness of the industry in the face of emerging disease threats.

Feed Costs: Fluctuations in feed ingredients, particularly maize and soybean meal, significantly impact the profitability of poultry farming operations. These prices are influenced by factors such as weather conditions, crop yields, global demand-supply dynamics, trade policies, and currency fluctuations. India is a net importer of key feed ingredients like soybean meal and palm oil, which can lead to shortages and price spikes, increasing feed costs for poultry farmers.

Competition from other sectors, such as animal husbandry, aquaculture, and food processing, also affects feed costs. Seasonal variability in feed costs can result from factors like crop harvests, weather conditions, and market demand. Higher prices of feed

ingredients during periods of scarcity or increased demand can lead to seasonal fluctuations in feed costs.

Transportation and logistics costs also contribute to feed costs, especially for poultry farmers in remote or rural areas with limited access to feed mills or distribution networks. High transportation costs, road infrastructure deficiencies, and supply chain logistics inefficiencies can increase feed procurement costs. Improving feed conversion efficiency through better feed formulations, nutrient management, and feeding practices can help optimize feed utilization and reduce costs per unit of output.

Government policies and subsidies aimed at promoting agriculture, animal husbandry, and poultry farming can influence feed costs for poultry farmers. Subsidies on feed inputs, such as fertilizers, seeds, and agricultural credit, can help reduce production costs and make feed more affordable for poultry farmers, supporting the growth and competitiveness of the poultry industry.

Managing feed costs effectively requires poultry farmers to monitor market trends, optimize feed formulations, adopt cost-saving measures, and diversify feed sources to mitigate risks and improve profitability in the face of fluctuating feed prices.

Regulatory Compliance: The Indian poultry industry faces numerous regulatory challenges, including food safety, animal welfare, environmental sustainability, and labor standards. These regulations are crucial for maintaining competitiveness and ensuring the health and well-being of poultry birds. The Food Safety and Standards Authority of India (FSSAI) is responsible for ensuring food safety and quality standards in the industry, which includes hygiene practices, HACCP systems, regular inspections, and record-keeping. Animal welfare standards are overseen by the Prevention of Cruelty to Animals Act, 1960, and the Animal Welfare Board of India (AWBI), which regulate housing, stocking density, ventilation, lighting,

UTTARA IMPEX PVT. LTD. ADVANCED NUTRITION LAB



UTTARA IMPEX PVT. LTD. has set-up an Advanced Nutrition Lab for the Indian poultry farmers to help them to analyse the raw material and poultry feed. The laboratory is equipped with an Advanced FT-NIR machine, Toxin Analyser and Advanced Protein Analyser.



Amino Acid Profile
Apparent Metabolisable
Energy [AME]
Total Phytic & Available
Phosphorous [TPP]
Total & Standardised Ileal
Digestible Amino Acids
[TDAA]

Moisture
Crude Protein
Crude Fat
Crude Fiber
Total Ash
Sand & Silica
Total Phosphorus

Calcium Magnesium Salt Soluble Protein Urease Activity Thirum
Aflatoxin
Ochratoxin
T2 / HT-2 Toxin
Zearalenone

Contact Details:

Mr.Shankar Reddy: 8008802148 / Mr.Vijay Kumar: 8008101670

UTTARA IMPEX PVT. LTD.

transport, and slaughter practices.

Environmental regulations aim to minimize the environmental impact of poultry farming activities, including waste management, pollution control, and resource conservation.

Compliance with these regulations requires poultry operators to manage waste responsibly, prevent contamination of air, soil, and water resources, and mitigate the adverse effects of odor, dust, and noise pollution on surrounding communities.

Labor standards and occupational safety govern employment practices, working conditions, wages, and occupational safety standards for workers in the poultry industry.

Compliance with these standards ensures fair treatment, protection from workplace hazards, and access to safe working environments. Trade regulations and export requirements govern international trade in poultry products, including import-export permits, sanitary and phytosanitary standards, quarantine protocols, and certification requirements.

Certifications and quality standards, such as ISO, HACCP, Halal, and organic certifications, provide assurance of compliance with international quality, safety, and ethical standards for poultry products. Effective regulatory compliance management requires proactive engagement, continuous monitoring, and investment in resources, training, and infrastructure to meet evolving regulatory requirements and industry standards.

Infrastructure Bottlenecks: Inadequate infrastructure in the poultry industry, including cold storage facilities, transportation networks, and processing plants, is a significant challenge. These bottlenecks can lead to higher production costs, postharvest losses, and market inefficiencies. The lack of adequate cold storage and processing facilities can result in spoilage, deterioration of quality, and increased post-harvest losses. Poor road infrastructure, inadequate transportation networks, and inefficient logistics systems contribute to transportation

bottlenecks. Improving transportation infrastructure, enhancing logistics efficiency, and investing in cold chain logistics solutions are essential for reducing transportation bottlenecks and ensuring timely delivery of poultry products to markets.

The distribution and supply chain for poultry feed inputs also faces challenges such as supply chain inefficiencies, inadequate storage facilities, and irregularities in feed distribution networks. Strengthening feed distribution networks, investing in storage infrastructure, and improving supply chain management practices are crucial for addressing these bottlenecks. Limited marketing and distribution infrastructure for poultry products, including retail outlets, wholesale markets, cold storage facilities, and processing centers, constrains market access and distribution channels for poultry farmers and processors. Developing marketing infrastructure, establishing efficient distribution channels, and promoting direct market linkages between producers and consumers can help address these bottlenecks and improve market access for poultry products.

Technology adoption and digital solutions can help overcome infrastructure bottlenecks by improving efficiency, transparency, and connectivity across the poultry value chain. Investing in technology infrastructure, digital literacy, and innovation ecosystems can facilitate the adoption of digital solutions and mitigate infrastructure bottlenecks in the poultry industry.

Consumer Perception: Consumer perception in the poultry industry is influenced by factors such as quality, safety, nutritional value, price, convenience, brand reputation, ethical considerations, and cultural preferences. Factors such as antibiotic use, food safety concerns, and environmental impacts of intensive production systems can influence consumer preferences and consumption patterns. Building trust through transparency, quality assurance, and sustainable practices is crucial to overcome these challenges.

Quality and safety assurance are essential for building consumer trust in poultry products. Consumers expect fresh, hygienic, and free from contaminants, additives, and pathogens. Nutritional value and health benefits are also important, with poultry products valued for their high-quality protein content, essential vitamins and minerals, and lower saturated fats. Price sensitivity and affordability are significant factors, with consumers seeking value for money and affordable options. Offering competitively priced products, promotional offers, and value-added packaging can attract price-conscious consumers and enhance market competitiveness.

Convenience is a key consideration for busy consumers seeking quick and convenient poultry products. Product diversification and innovation appeal to diverse consumer preferences. Brand reputation and trust play a significant role in shaping consumer perceptions, with established brands enjoying consumer loyalty over lesser-known or generic brands. Ethical and sustainability considerations, such as animal welfare and environmental sustainability, can resonate with socially conscious consumers and enhance brand reputation.

Cultural acceptance and culinary preferences also influence consumer perceptions and consumption patterns of poultry products in India.
Understanding cultural nuances, flavor preferences, and cooking methods helps tailor product offerings and marketing strategies to suit local tastes and preferences.

In conclusion, while the Indian poultry industry is poised for growth driven by rising demand and technological advancements, it must navigate through various challenges to realize its full potential. Strategic investments in biosecurity, technology adoption, and supply chain infrastructure, coupled with regulatory reforms and consumer education, are essential to sustainably capitalize on the opportunities in the dynamic landscape of the poultry sector in 2024 and beyond.



TUPCIN FORTE®

A UNIQUE IMMUNOMODULATOR FOR IMPROVING IMMUNITY IN BIRD SYSTEM

Poultry Feed Supplement



COMPOSITION:

Tupcin Forte contains selective Immunmodulatory peptides, Resveratrol and other anti-viral components.

FUNCTIONS:

A unique Immunomodulator for minimising all enveloped viruses upto 99.99% in birds system and as a supportive to control various induced stress.

INDICATIONS:

- To reduce all enveloped viral load (ND, IB and WND Viruses)
- To enhance Microbial Immunity
- To Control Early Chick Mortality
- As a Supportive to Control Various Induced Stress Conditions

RECOMMENDATIONS:

3g/50 birds/day 500g / MT of feed



For Further Details BIOSINT NUTRACEUTICALS,

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

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

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

e-mail: info@biosintnutraceuticals.com, www.biosintnutraceuticals.com



Feather it's way of Processing & Utilization



Dr Nazir Ahmed^a, Dr Ajaz A Dar^b, Dr Mir Rovida^c and Dr Malik Raies Ul Islam^d

*Scientist Animal Science KVK-Kupwara-SKUAST-K

*Assistant Professor Veterinary Medicine-SKUAST-K

*Guest Lecture Division of LPT-F.V.Sc. and A.HSKUAST-K

^dScientist Animal Science KVK-Kupwara-SKUAST-K Corresponding Author animaldr2@gmail.com Feathers are by product of poultry, They are produced in large quantities as a by-product at poultry-processing plants, reaching millions of tons annually throughout the world, almost 40 million tonnes of chicken feathers produced annually across the globe have been incinerated or dumped with other waste material and are often considered a waste disposal leads to environmental pollution. However they have multiple uses viz: Automotive industries, packing material, insulation, household product, soil control, winter jackets, manufacture of Plastics, energy production, fertilizer and root substrate, livestock feed, diaper filling, aircraft, biodegradable composites, fabric etc. keeping in view of huge production and importance of feather there is need of utilization of latest technologies for commercial utilization of feather which will benefit poultry producers end user industries and protect environment.

Processing of feathers:

There are five steps involved in the processing of feather, by which the feathers are sanitized after that the feathers are separated and sorted according to their size, weight and use. These are;

De-Dusting:

It is the first system involved in processing of feathers in which dust and foreign particles are removed. The system consists of feeding equipment, pre-separator for course waste, dedusting for elimination of fine dirt and fine particles and filtering system for bagging of waste material. Feathers are weighed up 500 lbs and are placed in the bale separator where they are broken apart and sent to loading silo from where they dropped into dedusting machine and sent through a series of cycles to remove course waste

and fine dust by vacuum chamber after this de-dusted feathers are sent to the loading silo of washing machine and the naturally bio-degradable material is bagged for land fill sites.

Washing System:

After de-dusting the feathers are ready for washing. This system consists of feeding equipment, washing chamber and centrifuge. The down and feathers are sent to the loading silo. Then up to 500 lbs are dropped into the washing which contains warm water, detergent and degreaser. These are added to ensure proper cleaning. The feathers are rinsed to remove chemicals applied in the washing and to remove fine dust and residue. In the final rinsing process sanitizing agent is added to eliminate bacteria rendering the down and feathers ensure that they will stay cleaner and fresh. These feathers are sent to centrifuge which will remove the bulk of water through whirling motion. Once this is completed the feathers are sent to the loading silo of the steam dryer.

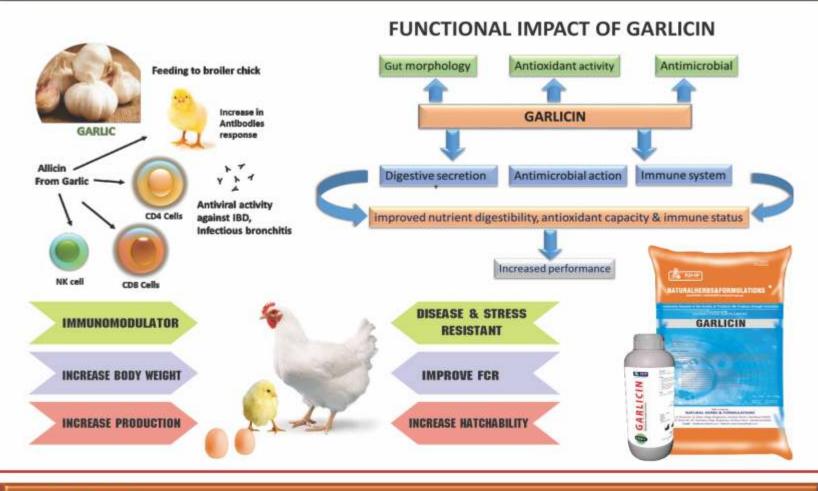
Drying System:

This system consists feeding equipment, steam dryer, cooling chamber and the filtering system and feed into the steam dryer where the temperature is raised up to 100 c for drying and sterilizing them. After drying feathers are transferred into the cooling chamber and are kept in continuous motion through air circulation in a large cylinder where they are cooled and fluffed. The find dust is removed through filter system after washing; drying and sterilizing these feathers are sent to sorting machine.

Sorting System:

This system consists of feeding equipment sorting machine and filtering system, up to 200 lbs of feathers are sent to the loading silo

GARLICIN Antiviral & AGP Replacer



Natural egg yolk Coloring enhancer & AGP Replacer









NATURAL HERBS & FORMULATION PVT. LTD.

Corporate Office: 3rd Floor, Pinnacle Plaza, 83/154, Jakhan, Rajpur Road, Dehradun, Uttarakhand, INDIA

E-Mail: info@naturalherbs.co.in | Website: www.naturalherbs.co.in

where a small batches are dropped into sorting machine and are separated by swiftly circulating air into the vertical chambers, the less buoyant feathers settle into compartments according to their size and weight and down accumulate in the last compartment. This process takes four hours to fully separate down and feathers. In the sorting process the fine dust and impurities are removed through a filter system. After sorting the feathers are sent for bagging.

Bagging System:

The separate down and feathers are removed from various compartments of the sorting machine which are the transferred through a vacuum system in the large bags which are located inside each bagging chamber according to quality, use etc. They are filled, after filling the bags they are removed tied and labeled.

Uses Of Feather:

- Automotive textile: Usages of Nonwoven made out of Chicken feathers are used in seats and cushioning, Interior Linings etc.
- Packing material: while transporting delicate articles from one place to another, the cartons lined with

- nonwovens made out of chicken feathers are placed inside as the interlining which makes sure that the articles are tightly impact at the same place, and would be transported without any damages.
- Filter property: Nonwovens made out of chicken feathers as obvious it has a very good porosity and is lighter in weight, it has a promising future in Chemical industries as it has a good resistance to milder acids and alkalies.
- Insulation: To conduct any kind of electricity one must have a conducting element like water content (or moisture). But the chicken feathers lack such elements, so they hence a very good insulating property hence they can be act as insulating materials.
- Household product: for the Nonwovens made out of Chicken feathers are very versatile in their property they are used as decorating materials in the households.
- Soil control: The nonwovens made out of Chicken feathers are very stiff and rigid where in which when placed on the soil it will restrict the

- eroding of the top layered soil, thereby controlling soil erosion respectively.
- Winter jackets: The nonwovens made out of Chicken feathers are used in the jackets as the interlining where in which it keeps the body very warm.

Utilization Of Feathers:

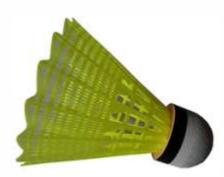
Researchers have reported that feathers have uses in animal feeds, green house industry, erosion control, upholstery, artwork, thermal insulation, paper alternatives (49 percent wood fiber and 51 percent feather fiber), lightweight structural materials, biodegradable composites, water filtration fibers, fabric (that is biodegradable), aircraft and automotive industries and diaper filling Therefore, technologies should be developed and customized for commercial utilization of feathers for the different World (developed and developing) economies. This will benefit poultry producers, end user industries and the environment.

Manufacture of Plastics

Feathers are used in the manufacture of plastics. Plastics are of two groups, thermoplastics and thermosetting plastics. Thermoplastics are















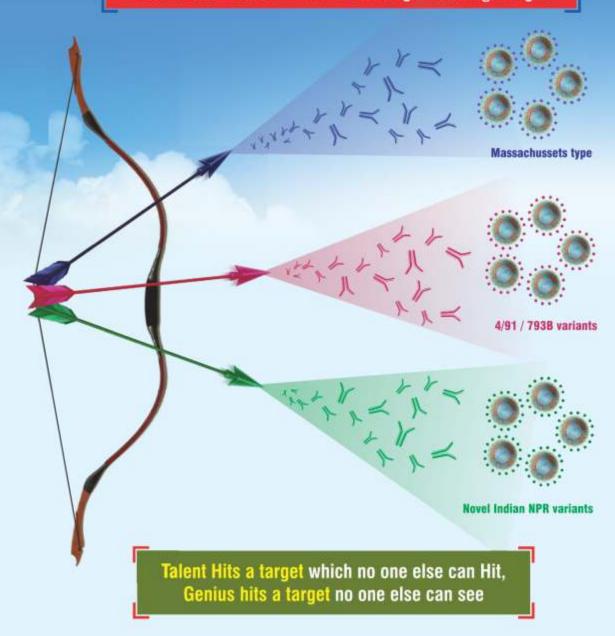
VHBRO-MN

AVIAN INFECTIOUS BRONCHITIS VACCINE, INACTIVATED

(Massachusetts And Novel Indian Nephropathic Strains)



Perfect Vaccine Candidates Catching a Moving Target



VENTRI BIOLOGICALS

(Vaccine Division of VHPL)

'Venkateshwara House', S. No. 114/A/2, Pune Sinhagad Road, Pune 411030. Tel.: +91 (020) 24251803, Fax: +91-20-24251060 / 24251077.



manufactured from oil and natural gas. These are expensive raw materials, therefore, research has gone into finding alternative material and processes for making plastic. Thermoplastics include nylon, polyethylene, polystyrene, polyvinyl chloride, and many other kinds. They are used to make consumer and industrial products ranging from toothbrush bristles to soda pop bottles to car bumpers. Thermoplastics need heat (or chemicals) to harden from a liquid into a final shape, and can be melted and remolded time and again.

Chicken-feather-based thermoplastics are stable in water while still maintaining strong mechanical properties. They are substantially stronger and more resistant to tearing than plastics made from soy protein or starch, and have good resistance to water (American Chemical Society, 2011). Feather-derived plastic can be molded just like any other plastic and has properties very similar to plastics such as polyethylene and polypropylene (USDA, 2009). This makes them a unique material for packaging or any other application where high strength and biodegradability are desired.

Energy Production

In the globe, man is facing two major challenges, waste disposal and the need for an abundant source of clean energy. Feathers, a byproduct of poultry processing, usually poses a disposal challenge. The perfect solution to both of these problems is to turn the waste into energybiofuel. This energy from garbage could cut carbon emissions by 80% while replacing the need for large amounts of petroleum. Biodiesel is a fuel comprised of mono-alkyl esters of long chain fatty acids that are derived from vegetable oils or animal fats. The main problem the biodiesel industry frequently faces is the availability of cheap and abundant, high-quality feed-stock. Thus, finding alternative, non-food, feed-stocks is a priority. Through research to produce biofuels from non-food

sources, it has been discovered that feather meal offers a promising feed-stock source for biodiesel production. Poultry feathers are inexpensive and abundant. Feather meal (hydro-lyzed poultry feathers) is defined as "the product resulting from the treatment under pressure of clean, undecomposed feathers from slaughtered poultry. By boiling chicken feather meal, the 12% fat content is extracted and processed into usable biofuel.

Use as Fertilizer and Root Substrates

Feather contains about 15% protein and has high potential for use as slow release nitrogen fertilizer in greenhouses and nurseries. However, the release of nitrogen from feathers is slow to be used as a fertilizer. Plants grown in substrates containing up to 30% feather fiber were of marketable qualities. Therefore, plants can be grown in substrates containing up to 30% feather fiber, reducing reliance on peat and reducing overall cost of the substrate. Therefore, feather fiber can be used at rates up to 30% with peat and perlite substrates without negatively affecting the physical properties of the substrate. However, at 30% feather fiber with peat and bark, aggregation or clumping of the feather fiber occurs during mixing of the final substrate.

Use as Livestock Feed

Feather meal is a byproduct made of ground-up poultry feathers. It is produced by heat processing (rendering-clarify or purify by melting-heat processing) at 115° to 145° C that is sufficient to kill bacteria, viruses and many other micro-organisms. The product is an aseptic protein product that is free of potential biohazards and environmental threats. This makes feather meal safe for inclusion in animal feeds for a wide range of animal species, including fish and shrimp. Done correctly, heat processing also denatures the proteins slightly, which enhances their digestibility. Feather meal has high protein content and has a great

potential as a source of protein and amino acids for animal feed. However, it has low levels of essential amino acids as well as poor digestibility. Feather meal is almost pure keratin, which is not easily degradable by common proteolytic enzymes, but can be efficiently degraded by specific proteases such as keratinase. Feather meal is hydrolyzed poultry feathers. It is rather unpalatable and should be introduced into cattle diets gradually and limited to 0.45 to 0.75 kg per head per day. In many countries, fish feeds are formulated to contain 3-7% feather meal. Crude protein in feather meal is highly digestible to fish. However, the rendering process in feather meal production is an effective method for ensuring biosecurity because processing conditions and drying denature compounds and create an unfavorable environment for viruses, bacteria and other micro-organisms to survive and grow in the product. This should assure food safety and protect human and animal health. Processing animal by-products by rendering should allow traceability of finished products for quality assurance. This can be achieved by developing HACCP programmes for the feather rendering industry. Then the rendered product will be safe for compounding animal feeds.

Other Uses

Feathers fabrics have been used in erosion control. Turkey feather fiber fabrics have similar prevention of erosion. In prevention of erosion, feather fabrics increased soil moisture content and decreased soil compaction, which are critical properties for successful ecological restoration of habitats. Geese and ducks are raised in America, Asia and Europe for their feathers (Ariel, 2012). About 50 % of the down and about 42 % of the coarser feathers of geese and ducks are used to fill pillows and blankets. Feathers are also used for making feather dusters. These are cleaning devices that remove dust from objects. Goose or duck feather are used in shuttlecock. Feather are also having various ornamental uses.



UT Glysomin GOLD



UTTARA IMPEX PVT. LTD.

Feed Supplement Division, Venkateshwara House, Pune.

For trade Enquiry Contact: North India – Mr. Harlom Singh Chauhan / +919552526901,
East India – Mr. Kunal Goswami -/ +918888858839, T.N – Mr. Michaelsamy -/ +918778408835,
Maharashtra – Swapnii Ballal -/ +919689948713, Telangana/ Andhra Pradesh
Orissa – Mr. Shankar Reddy -/ +918008802148









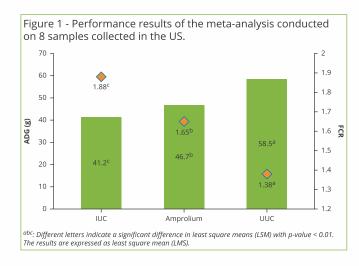
Efficacy amprolium re-confirmed

BEN DEHAECK, DVM, GLOBAL PRODUCT MANAGER ANTICOCCIDIALS, HUVEPHARMA

One of the most important diseases in poultry is coccidiosis, caused by infections with a highly contagious intestinal parasite of the genus Eimeria. An effective way to target this parasitic disease is the use of coccidiostats, mixed into feed. The EU has regulated the use of coccidiostats in regulation No 1831/2003 (the feed additive regulation). Amprolium hydrochloride ('amprolium') is a synthetic coccidiostat that does not possess any antibacterial activity, making it suitable for antibiotic-free production systems. Amprolium is one of the few synthetic compounds for which the mode of action is clearly described: due to its close structural similarity to thiamine (vitamin B1), it acts as a thiamine antagonist and competes for the absorption of thiamine by the Eimeria parasites. Thiamine analogues, such as amprolium, block absorption of thiamine and, as a result, cause starvation of the parasite due to thiamine deficiency. The thiamine transport system in the parasite is more sensitive to amprolium than that of the host, which explains why this coccidiostat is safe for use in chickens. It seems especially efficacious during schizogony (one of the three phases of the life cycle of Eimeria) as the demand for thiamine is at its highest then, thus allowing the development of an immune response.

RESULTS META-ANALYSISVALUABLE BREEDERS

Amprolium has been used intensively for a long time worldwide. To evaluate its efficacy after years of use, both in water (as treatment) and in feed (preventive) in the US, a meta-analysis on eight ASTs (anticoccidial sensitivity trials) was conducted. The Eimeria strains used to challenge the birds were collected in 2018 from eight different regions in the US. Each sample originated from a different state and/or complex and was composed of subsamples from multiple farms. Each strain was evaluated in an individual trial, conducted by the University of Georgia (US), using the same standardized protocol. Birds reared in a clean environment until 12 days of age were allocated to different groups: uninfected untreated control (UUC), infected untreated control (IUC) and infected treated group (IT). The latter received amprolium in the feed at 125ppm (registered dose) until the end of the trial. At 14 days of age, the birds were infected with the respective Eimeria strains collected from the different areas. At the end of the trials (seven days post infection), performance parameters were measured between day 12 (allocation) and the end (day 20).



SUITABLE FOR ABF SYSTEMS

Meta-analysis of the different AST trials showed that amprolium significantly reduced the feed conversion ratio (FCR) from 1.88 to 1.65 and increased the average daily gain from 41.2 g to 46.7g compared with the IUC, indicating that amprolium is able to overcome the negative effects caused by the coccidiosis infection (Figure 1). These results confirmed the efficacy of amprolium to control coccidiosis under field conditions where the product was used extensively. In summary, amprolium (Coxam®)* has robust efficacy after many years of use and it is suitable for use in **antibiotic-free** (ABF) production systems.

To know more, please contact Huvepharma technical team



Huvepharma SEA (Pune) Pvt. Ltd.

42, 'Haridwar', Road 2 A/B, Kalyani Nagar, Pune 411006 Customer Care Contact: +91 20 2665 4193 Email: salesindia@huvepharma.com Website: www.huvepharma.com



We took an already great product and made it even better.

eXolution is now Xcelsio.

Our relentless effort to make the world a safer and healthier place has led us to create Xcelsio. After years of cutting-edge research in Korea, we have come up with an advanced formulation to make Xcelsio more potent than before.

Xcelsio comes with a more concentrated cocktail of bacteriophage and is fortified with more Bacillus subtilis. This new and improved formulation, created specifically for use in

poultry, is simply unmatched in controlling pathogenic bacteriagiving you Total Gut Control.

Each of our bacteriophages is painstakingly selected using our proprietary Bacterphage F technology to target and eliminate specific bacteria; leaving other beneficial bacteria completely unharmed. This natural surgical strike on disease-causing bacteria is the safest, non-toxic, and most effective prophylactic alternative to antibiotic growth promoters.



MADE IN KOREA BY:







Compatible with all Performance Enhancers, Growth Promoters, Acidifiers, Anti-Oxidants, Minerals & Enzymes

BACTERIA IT CONTROLS

Typhimurium Gallinarum Choleraesuis, Derby, Dublin, Enteritidis, Pullorum

F4 (K88), F5 (K99), F6 (987P), F18, F41

Clostridium Perfringens

FOR USE IN BROILERS, LAYERS & BREEDERS

IMPORTED & DISTRIBUTED BY:

Septemos Agribustness: Consutting LLP 326 HRBR Layout, 4th A Cross 3rd Block, 3rd Main, Kalyon Nagor Bangalore 660040, Karnataka (KA), INDIA



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



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

In his address, Shri Parshottam
Rupala highlighted the significance
of "One Health" concept, which is
deep-rooted in the Indian tradition
and culture exemplifying the
interconnectedness of all living
beings. He echoes the concept of
"Vasudhaiva Kutumbakam,"
meaning the world is one family,
underscores the importance of
harmonious coexistence and
interconnectedness among
humans, animals, and the

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

environment. He further highlighted India's substantial vaccination endeavours and the dedication to eliminating major diseases, the initiatives in pandemic preparedness and the One Health approach which plays a crucial role in

ensuring the well-being of both animal and public health.

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

Chairman and Managing Director of NDDB and IIL Shri Meenesh Shah highlighted the challenges in the Indian livestock and vaccination during the Animal Health Conclave. The Animal Health Conclave hosted technical sessions, covering topics such as the WHO-PQ Process in Animal Health, Decarbonization of Vaccine Manufacturing, Al's (Artificial Intelligence) role in disease prevention, Antimicrobial

Resistance (AMR) Public Health Policy in the One Health framework, and Modern Approaches to Animal Diagnostics for Field Deployment, shaping the sector with innovation and precision.

The conclave focused on fostering dialogue and collaboration among esteemed speakers and experts to enhance animal health. The technical sessions were the core of the event, featuring in-depth discussions on new vaccine technology, the decarbonization of vaccine manufacturing, AMR Management with the One Health Approach, Al applications in disease surveillance, and modern approaches to diagnostics for field deployment.

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



Secretary, Department of Animal Husbandry and Dairying chairs roundtable meeting with leading Poultry Exporters to boost Indian poultry exports and identify challenges and strategies to strengthen poultry ecosystem in New Delhi

Ms. Alka Upadhaya says that production of eggs and broilers has been rising at a rate of 8 to 10 percent per annum To promote export the department recognizes 33 poultry compartments as free from Avian Influenza: Ms. Upadhaya In the fiscal year 2022-23, India exporting a notable 664,753.46 metric tons of poultry products, with a total worth of Rs. 1,081.62 crores (134.04 Million USD) to over 57 countries



A roundtable meeting was held yesterday here under the chairpersonship of the Secretary, Department of Animal Husbandry and Dairying, Ms. Alka Upadhaya. This strategic gathering brought together key stakeholders, including leading companies, state governments, and industry associations, to deliberate on the "Export of Indian Poultry Products: Challenges and Strategies to Strengthen the Poultry Ecosystem."

In the meeting Ms. Alka
Upadhaya highlighted that the
Indian poultry sector, now an
integral part of agriculture, has
played a crucial role in meeting
protein and nutritional needs.
While the production of crops
has been rising at a rate of 1.5 to
2 percent per annum, that of

eggs and broilers has been rising at a rate of 8 to 10 percent per annum. Over the past two decades, it has evolved into a mega-industry, positioning India as a major global producer of eggs and broiler meat.

Ms. Alka Upadhaya informed that the Department of Animal Husbandry & Dairying has been taking various initiatives to boost the export. The Department has recently submitted a selfdeclaration of freedom from High Pathogenicity Avian Influenza. To promote export the Department has recognized 33 poultry compartments as free from Avian Influenza. The Department based on the validity has been notified 26 compartments to the World Organisation for Animal Health (WOAH). On October 13, 2023, the self-declaration was approved by WOAH. Further, the Department took initiatives to resolve the issue of feed shortage in the past years. Also the Department took steps to counter the misleading information which spreaded across the country during the COVID time against the



consumption of poultry products.

Ms. Alka Upadhaya strongly emphasised on the promotion of poultry exports, strengthening the Indian poultry sector, improving the ease of doing business, addressing challenges in poultry product exports, and strategizing the integration of units in the informal sector and further cementing poultry sectors position on the world stage. She also shared insights on Department proactive approach to mitigate the risks associated with HPAI by adopting the concept of poultry compartmentalization to facilitate the international trade of poultry and poultry-related products.

In the fiscal year 2022-23, India made significant strides in the global market, exporting a notable 664,753.46 metric tons of poultry products, with a total worth of Rs. 1,081.62 crores (134.04 Million USD) to over 57 countries. According to a recent market intelligence study, the Indian poultry market achieved a remarkable valuation of USD 30.46 billion in 2023 with a CAGR of 8.1% from 2024-2032.

The roundtable meeting served as a platform for dynamic exchanges, encouraging collaborative efforts to address current challenges and formulate robust strategies for the sustainable growth of the Indian Poultry sector. In the meeting the poultry sector

representatives, exporters discussed various issues related to poultry export.

About the Department of Animal Husbandry and Dairying:

The Department of Animal
Husbandry and Dairying is dedicated
to promoting animal welfare,
ensuring sustainable livestock
development, and fostering a
conducive environment for the dairy
and meat sectors in India.

About Invest India:

Invest India is the national investment promotion and facilitation agency, playing a crucial role in catalyzing investment, fostering innovation, and promoting ease of doing business in India.







Fuelled by *Bacillus siamensis* ZMT02, the novel probiotic strain isolated from chicken GIT

22 Field Trials*

1,08,236 broiler chickens

Safe | Performance | Anti-in

Anti-infective Anti-inflammatory

40 - 70 points"

Improvement in cFCR

Upto 70 g

Improvement in BWT in open shed

Upto 120 g

Improvement in BWT in EC shed Upto 30%

Improvement in livability vis-à-vis antibiotic control

Zene AH 500 9 Not Sene AH 500

^{*1} FCR point represent third/last decimal point of 1000

Ceah Organises a Special Programme for Nabard Officers Across India



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

The inaugural function of the programme was graced by Mrs.
Brindha, General Manager, NABARD
Karnataka Range, Prof. K.C. Veeranna,
Vice Chancellor, KVAFSU, Karnataka and
Dr. Vasappa, DGM and Head, Union
Bank Knowledge Centre, Bengaluru.
They all appreciated the joint venture of
NABARD and CEAH in exploring
entrepreneurship opportunities in

Animal Husbandry Sector with various business models in Dairy, Poultry, Sheep & Goat, Piggery etc.

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

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

Both faculty of NBSC, Dr. Sudharsan,

DGM, NABARD-NBSC Lucknow and Dr. Esakkimuthu, DGM, NBSC Lucknow presented topics from Technoeconomic aspects of Animal Husbandry Projects and financing of Animal Husbandry Activities – Role of NABARD.

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

On day two, 27th December, 2023, the NABARD officers were taken a field visit at 7.00 am to Desi cow unit established by a Chartered Accountant with 550



Desi Cows in one acre area at Kakolu near Hessarghatta. NABARD officers appreciated the great skill and enthusiasm of the entrepreneur for converting it into a very good business model in desi dairy sector.

The technical sessions started at 9.30 am with every session being punctually restricted for 30 to 40 minutes. The first session was from Mr. Ashok Kumar, MD, MAA integrators sharing of experience of his venture into various sectors of Agriculture and allied agriculture fields. He narrated his journey of borrowing and successfully repaying upto 150 crores financial assistance from banks. Presently he is actively involved in poultry entrepreneurship.

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

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

trading of piglets and adult pigs across the country especially Northeastern states.

The next session was on raw material dynamics in livestock feed by Mr. Jason John, Team Lead, United States Soya Export Council, USSEC India, in his presentation he narrated the global dynamics and Indian Supply and demand dynamics of Soya and Maize in India. He cautioned that growing animal husbandry required equally matching sectoral growth in soya and maize both in productivity and scale.

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

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

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

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

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

The next sessions by Dr. Gopakumar, MD, DLG India who presented on the sunrise sector "The Piggery Enterprise in India" with as high as 10 crore to 20 crore business opportunities per venture. This was followed by Mr. Naveen, MD, Nandu's and Mr. Rajesh, MD, SR Daily Nutrition presented on Startup ecosystem in poultry sector for retailing and branding.

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





The valedictory function concluded at 5.30 pm on 28th December, 2023. Dr. Abdul Rahman, Executive Director of Common Wealth Veterinary Association (former President CWVA) the global body. Dr. H. Raghuraja, Director General, National Academy of RSETIS, Ministry of Rural Development, Govt. of India alongwith their National Director, Sri. Murugesan and National Controller of RSETIS, Mr. Singh represented in the valedictory. Mr. Jeyachandran, Regional Head, (South India), UNDP also graced the occasion. The VIP dignitaries distributed certificates to NABARD officers. NABARD officers expressed greater satisfaction and appreciated the efforts of CEAH team in making the programme a great success.

The VIP dignitaries from CWVA, RSETI and UNDP praised CEAH as an Institution in bringing such a fantastic programme with full package of modules around financing of Animal



Husbandry business models. The event concluded with vote thanks by Dr. Esakkimuthu, DGM, NBSC, Lucknow

and promised to engage long term with CEAH with various programmes in the future.



PVS Group India Demonstrated a Leading Presence in "ACHAB International Expo 2023" at Dhaka, Bangladesh



PVS Group India -The Largest Manufacturer & Exporter demonstrated its high-quality manufacturing facilities and innovative products very successfully in 5th AHCAB International Expo 2023, organized by the Animal Health Companies of Bangladesh at the International Convention City Bashundhara (ICCB) in Dhaka. PVS Group strictly followed the tag line of this ACHAB event i.e. "Safe Proteins for a Healthy Nation," and company successfully introduced the new innovative-organic products in poultry, veterinary & aquaculture segment.

Dr. Pamulapati V. Seshaiah, the CMD of PVS Group, along with Dr. Ajit Jadhav (General Manager-Techno-marketing) and Dr. Abdur Rehman (Country Head Bangladesh), have successfully introduced company's high-standard manufacturing facilities in line with the company's goal of "Embracing Nature's Power" The emphasis on offering biologicalbased natural products for the poultry, veterinary and aquaculture industry with the aim of reducing reliance on antibiotics and chemicals aligns with the growing global interest in sustainable and environmentally friendly practices in this growing industry. This approach, emphasizing natural solutions and reducing dependence on antibiotics and chemicals, reflects a commitment to promoting healthier and more sustainable practices in the animal health industry. Dr. PVS, the CMD of PVS Group,

especially focused the companies R & D facilities certified by DSIR (Department of Scientific and Industrial Research) of central government of India, and its commitment to advancing the animal industry.

The PVS Group team - Dr. Ajit Jadhav and Dr. Abdur Rehman effectively communicated, exchanged and shared the useful information and made this event very successful, fostering positive connections with poultry farmers and industry professionals. Overall, the company's participation in the "5th AHCAB International Expo 2023" appears to have been a fruitful endeavour, showcasing its commitment to innovation, quality, and excellence in the field of poultry, veterinary and agua health care products.







AIPBA Sounds Alarm on Maize **Prices, Seeks Import Relief**



AIPBA Chairman Bahadur Ali stated in a letter to the Ministry of Fisheries, Animal Husbandry, and Dairy that ethanol makers' growing demand for maize has pushed prices skyward, posing a significant challenge to Indian poultry farmers.

The All India Poultry Breeders Association (AIPBA) demanded that the government allow duty-free maize imports to meet the poultry industry's needs, citing an increase in grain consumption for ethanol production and insufficient domestic output. AIPBA Chairman Bahadur Ali stated in a letter to the Ministry of Fisheries, Animal Husbandry, and Dairy that ethanol makers' growing demand for maize has pushed prices skyward, posing a significant challenge to Indian poultry farmers.

"With maize prices hovering around Rs 22-23 per kg across India, poultry farmers are grappling with unsustainable costs," he said, warning that the burden is expected to worsen further by February 2024, potentially harming the poultry sector. Against this backdrop, the association stated that the government has two options for addressing rising maize demand in livestock feed and other industries. One imports maize, while the other increases domestic production.

"However, a significant short-term increase in domestic output is considered improbable. As a result, importing maize from other countries appears to be the most viable solution to meet immediate demand," according to its representation. The current basic import duty on maize is 50%.

Citing concerns about rising maize consumption in ethanol production, the association stated that India's annual maize production of 34.60 million tonnes is insufficient to meet the needs of the poultry industry and the country's food security. The Indian Institute of Millets Research estimates that the poultry and livestock industry consumes more than 60% of the country's maize production.

Zenex Unveils Strategic Acquisition of Ayurvet, Boosting Animal Health Portfolio



Rich past, Exciting future

Zenex announced that it would acquire Ayurvet, a company founded by Pradip Burman that supplies ayurvedic and herbal medicines, feed supplements, and topical treatments for farm and companion animals, for an undisclosed sum.

According to Zenex, the acquisition strengthens the company's animal health portfolio, allowing it to meet local and international customer

demands. Ayurvet brings research and new product capabilities, a strong brand portfolio, complementary geographic access, as well as management and sales teams to the company.

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

Ayurvet was established as a subsidiary of Dabur India Limited in 1992 and later spun off as an independent entity in 2002.

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

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

Feathered Beginnings: ATMA Peren Launches

Poultry Farm School for Rural Prosperity



On December 18, 2023, the Agriculture Technology Management Agency (ATMA) Peren, Ahthibung Block inaugurated a 'Poultry Farm School' in Saijang village, Ahthibung Peren. On the occasion, Special Guest Helunsuipoing, Farm Manager, Veterinary College, Peren, expressed his gratitude to the progressive farmers and ATMA staff, particularly encouraging the farmers present to continue with the same sincerity and dedication. Kaikholun Sitlhou is the Farm Teacher at the Poultry Farm School, according to ATMA Peren. During the programme, the newly appointed Farm Teacher shared his success story as a poultry farmer and expressed gratitude for the recognition. Earlier, the event was chaired by Lhaihoichong Singson, Block Technology Manager (BTM), who gave a welcome speech. The inaugural programme began with an invocation prayer by the Council Chairman of Saijang village. Assistant Technology Manager (ATM) Lireni Lotha gave a brief speech about the concept of Farm School. Kevingullie ATM concluded the inaugural programme with a vote of thanks.

Following the formal programme, ATMA staff and the Special Guest paid a visit to the poultry farm and interacted briefly with the farmers. ATMA Peren reported that 20 farmers attended the event. ATMA Peren, Ahthibung block also mobilised the all-female Food Security Group (FSG) "Valpa" on December 18th, which consists of five members from Saijang. Both groups focus primarily on ginger and a few seasonal crops. ATM Lireni Lotha also provided a brief overview of the nature of FSG. Later, seed money/revolving funds were distributed to two existing self-help groups (SHG): Jonlhing SHG in Old Chalkot Village and Saheipah SHG in Phanjang Village. The main business of both groups is mushroom cultivation. Helugsuipoing, Farm Manager at the Veterinary College, initiated discussions with the SHGs about mushroom cultivation.

Indian Poultry Industry Poised for 8-10% Revenue Growth in FY 202324

and an increasing share of organised players in the industry. The report notes that while realisations were strong in the first half of the fiscal year 2022-23, they started tapering off due to excess supply.

However, there has been a pick-up in demand in the current fiscal year, resulting in an improvement in average realisations to Rs 107 per kg in the first half of fiscal year 2023-24 compared to Rs 101 per kg in the previous fiscal year. The report expects that the festive season and cold weather will further support demand and realisations for the remainder of the fiscal year.

The report also highlights that players in the industry have benefited from softened feed costs, with prices of maize and soybean, which make up a significant portion of feed costs, declining in the first half of fiscal year 2023-24. However, there are concerns about potential spikes in feed costs due to a substantial contraction in soybean harvest and delayed sowing of maize.



According to a report by rating agency Icra, the Indian poultry industry is expected to see revenue growth of 8-10% in the fiscal year 2023-24. This growth will be driven by significant volume expansion

The report mentions that there have been limited occurrences of avian influenza or bird flu in the current fiscal year. Localised incidences of bird flu were reported in Kerala and Jharkhand, but they



EGG Daily and Monthly Prices of December 2023



		1	- I	10	Lt	:5	C)1	L	JE	L	E1	Ш	U	e	I	4	U.	Ζ,	O							-	-				- Alberta
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 SUGO	GEST	ΓED	EGG	PRI	CES																											
Ahmedabad	575	575	560	565	570	575	580	585	590	595	600	605	610	615	620	625	625	625	625	628	631	634	637	642	647	650	653	655	645	630	633	613.06
Ajmer	=	=	_		_	559	_	=	=	=	=	=	=	=	=	601	601	601	625	610	614	621	629	640	640	642	642	655	600	620	620	598.94
Barwala	541	530	535	542	544	546	550	553	558	567	572	576	580	588	591	591	593	596	601	605	609	617	622	627	634	637	637	610	593	600	606	585.52
Bengaluru (CC)										一					\equiv			H	\equiv			H	H		625	\equiv			一			586.29
Brahmapur (OD)	548	523	523	533	543	548	548	558	563	570	575	585	590	590	595	595	595	595	600	605	609	614	619	624	629	634	640	640	610	610	610	587.77
Chennai (CC)	560	540	540	540	540	540	550	550	560	570	580	590	590	600	600	610	610	610	610	610	610	620	620	630	630	640	640	640	640	630	615	594.03
Chittoor	553	533	533	533	533	533	543	543	553	563	573	583	583	593	593	603	603	603	603	603	603	613	613	623	623	633	633	633	633	623	608	587.03
Delhi (CC)	564	564	551	556	564	567	568	575	577	581	589	595	599	605	612	615	615	617	620	625	630	634	644	650	652	660	665	665	650	645	645	609.65
E.Godavari	530	510	510	520	530	535	540	545	550	557	564	571	576	579	582	582	582	582	585	588	591	595	600	605	610	615	620	620	575	575	580	571.10
Hospet	510	490	480	485	490	500	505	510	520	525	535	540	550	555	560	560	560	560	560	560	565	570	575	580	585	590	595	595	585	570	570	546.29
Hyderabad	505	505	510	515	520	525	530	535	540	545	550	555	560	563	566	569	572	572	575	578	581	584	589	594	599	604	607	590	570	573	576	559.90
Jabalpur	540	535	535	542	546	546	553	557	561	568	578	578	578	578	578	578	580	585	595	600	605	615	620	630	640	640	640	630	610	590	600	584.87
Kolkata (WB)	565	555	572	587	587	592	620	620	627	635	645	645	645	645	645	635	635	638	638	640	655	660	665	672	675	675	645	625	630	630	630	630.10
Ludhiana	540	540	530	538	544	544	544	550	552	560	570	572	578	586	589	589	589	591	595	602	607	610	620	622	628	636	636	636	610	610	610	584.77
Mumbai (CC)	590	580	570	575	580	585	590	595	600	605	610	615	620	625	628	631	634	637	637	640	643	646	649	654	659	664	669	672	665	645	645	624.45
Mysuru	540	520	515	525	530	542	547	552	562	567	577	585	595	600	604	604	604	604	604	604	607	612	617	620	625	630	635	635	625	610	610	587.32
Namakkal	490	475	475	475	480	485	490	500	510	520	530	535	540	545	550	550	550	550	550	550	555	560	565	570	575	580	585	585	575	560	560	536.13
Pune	585	575	565	570	575	580	585	590	595	601	611	616	620	625	630	630	630	632	632	636	640	640	645	655	660	665	670	670	660	650	650	622.19
Raipur	535	525	525	535	545	545	550	560	565	565	580	585	585	585	585	585	585	585	585	600	600	610	615	620	630	635	635	635	610	600	600	583.87
Surat	580	580	565	565	570	575	580	585	590	595	600	605	615	625	630	635	635	635	635	638	641	644	649	654	659	664	666	666	655	635	638	619.65
Vijayawada	530	510	510	520	530	535	540	545	550	557	564	571	576	579	582	582	582	582	585	588	591	595	600	605	610	615	620	620	575	575	580	571.10
Vizag	530	530	530	530	535	540	540	550	550	560	570	580	585	590	595	601	601	601	601	601	601	605	608	610	615	620	625	625	625	625	625	584.00
W.Godavari	530	510	510	520	530	535	540	545	550	557	564	571	576	579	582	582	582	582	585	588	591	595	600	605	610	615	620	620	575	575	580	571.10
Warangal	507	507	512	517	522	527	532	537	542	547	552	557	562	565	568	571	574	574	577	580	583	586	591	596	601	606	609	592	572	575	578	561.90
Prevailing P	rice	S																														
Allahabad (CC)	581	571	571	586	590	590	590	595	595	605	610	614	619	619	619	619	619	619	629	643	657	667	676	681	686	686	686	671	662	652	667	628.23
Bhopal	545	560	550	550	555	560	560	570	570	580	585	590	595	595	595	590	595	610	610	610	610	620	625	630	640	640	650	640	630	620	615	596.61
Indore (CC)	545	545	545	545	550	550	550	560	560	570	570	575	580	580	590	600	595	595	595	605	620	625	635	640	640	640	640	630	610	610	610	590.48
Kanpur (CC)	586	586	586	586	586	586	586	600	600	614	614	614	619	629	629	629	629	629	629	643	643	648	662	671	671	671	671	671	652	652	652	627.23
Luknow (CC)	600	600	600	600	600	600	600	620	620	633	633	633	640	640	650	650	650	650	660	667	667	667	683	683	700	700	700	693	683	683	683	648.00
Muzaffurpur (CC)										Ш							\Box	Ш				ш							Ш		667	647.10
Nagpur	565	560	560	560	560	560	570	570	580	580	580	585	590	590	600	600	600	600	600	600	620	625	625	635	635	640	640	640	600	615	610	596.61
Patna	603	593	598	603	605	605	610	615	620	630	635	638	640	650	650	650	655	658	665	665	670	680	685	690	695	700	700	670	655	660	667	647.10
Ranchi (CC)	595	595	595	600	600	600	600	610	610	620	643	643	643	643	648	648	648	650	650	650	652	667	667	671	686	686	686	676	657	657	657	640.42
Varanasi (CC)	600	600	590	600	607	610	610	617	617	617	620	630	633	640	650	650	650	650	650	660	673	680	683	687	690	693	693	693	667	667	667	644.97

did not spread further. Any major local outbreaks may have temporary effects on demand and realisations in the affected and nearby regions.

Looking ahead, the report states that the approval of India's self-declaration of freedom from bird flu in specific approved farms by the World Organisation for Animal Health (WOAH) and the resolution of the poultry dispute between India and the US could provide new opportunities for Indian poultry companies in the global market. However, the entry of US poultry products into the Indian market could increase competitive intensity and put pressure on realisations.

Overall, the report expects the domestic demand for poultry to remain favorable in the medium to long term, supported by a rising urban population and changing eating habits. Poultry companies are expected to invest in capacity additions towards feed mills and move towards forward integration into meat processing plants to support the transition to higher margin value-added products. However, increased working capital requirements and expected rise in input costs could keep debt levels high for poultry companies.

Southern Dominance Challenged: As Uttar Pradesh, and West Bengal Boost Poultry Production

State governments are encouraging the poultry industry by providing incentives and subsidies. Currently, the five southern states account for more than half of the country's total poultry production.



However, with Uttar Pradesh, West Bengal, Bihar, Madhya Pradesh, and Odisha offering significant incentives to boost production in their respective states, the South may face stiff competition.

The local state governments encourage the poultry industry by providing incentives and subsidies. And because states like Madhya Pradesh and Bihar are rich in soya and maize, two key feed components for birds, the local industry is thriving.

The demand in many northern and eastern states is declining. The sharp increase in transport costs and raw material is making the South less competitive.

According to data from the Union Ministry of Commerce, Tamil Nadu, Andhra Pradesh, Telangana, Kerala, and Karnataka combined to produce 15.51 lakh tonnes of poultry products out of a total of 36.23 lakh tonnes in the country in 2018-19.

However, that picture could change. Take West Bengal, where egg imports have dropped dramatically over the last decade. In 2012, the state received 80 percent of its total egg supply from the South; by 2023, it had reduced that to 25 percent.

This was made possible by the State government devising an excellent plan to increase poultry production capacity and drive self-sufficiency.

West Bengal consumes approximately 4.30 crore eggs per day. Only about 80–100 lakh eggs are imported from the South. In West Bengal, egg production is growing at a rapid pace. This year, the state experienced the highest growth rate in the country. The government is committed to making the state self-sufficient in egg production by March 31, 2025.

Uttar Pradesh has well-thought-out plans for the poultry industry. It has announced that it will make extensive use of agtech to improve market linkages, reduce waste, improve cold storage infrastructure, and ensure better supply in order to become a \$1 trillion economy by 2028.

Perhaps it's time for the South to stop putting all its eggs in one basket. They should look at the export opportunities, especially in countries like Sri Lanka, Bangladesh, and the Gulf. To capitalise on this opportunity, they must improve the quality of their eggs and chicken.

Kathua Gears Up for Largest Poultry Hatchery to Boost Local Economy

Kathua district, the gateway to Jammu and Kashmir, is expected to receive the largest poultry and hatchery facility, increasing monthly chicken production across the Jammu division.

According to official sources, the largest chicken hatchery worth Rs 5 crores is set to open in Kathua district, where it will be the primary producer of chicks using a low-tech system to increase egg and meat production in the region.

According to sources, the Animal Husbandry Department's largest chicken hatchery, which will be built in the Kathua district, will produce between 25,000 and 30,000 chicks monthly.

"The department is establishing a project in Kathua to promote the poultry sector. The project will cost around Rs five crore, and the unit will be located in Kathua's Animal Husbandry Department, according to officials.

Official sources added that the hatchery units will provide special benefits to the Kathua district and create new employment opportunities for the youth, adding that "the unemployed youth after training will be able to set up poultry and hatchery units on a large scale for which the department is providing a 50 percent subsidy."

They also mentioned the construction of a feed mill near the hatchery.

"The monthly production of chicken will be exported across the parts of Jammu and Kashmir," official sources added, adding that the chicks produced by LTP will increase the production of eggs in addition to chicken.

"The hatchery unit will also be used as a training centre for the people associated with the poultry sector so that they can flourish their business with modern technologies," the spokespersons said.

"The new hatchery unit will be established in the district by the Animal Husbandry Department under the Upgradation and Strengthening of Poultry Hatchery Programme," the officials said.

"The coming up hatchery unit will be able to meet the demand for eggs and meat in the area and no need will arise to import chickens from outside states and the local people will also get new employment opportunities on a large scale," according to the announcement.

Guwahati Hosts Three-Day Livestock and Poultry Show

The three-day Livestock and Poultry Show kicks off in Guwahati, Assam. The three-day Livestock and Poultry Show 2023-24 began in Guwahati on Friday. The show will run until January 7 at the College of Veterinary Science Playground, Khanapara, Guwahati.

The show is organised by the Assam Animal Husbandry and Veterinary Department and the Assam Livestock and Poultry Corporation. The show aims to foster meaningful interactions between livestock industry leaders and potential farmer entrepreneurs. Atul Bora, Minister of Animal Husbandry and Veterinary Affairs in Assam, Sikkim's Lok Nath Sharma, MP Queen Oja, and other senior officials were in attendance.

Minister Bora stated that the government is working to advance the state's livestock sector. "The Assam government, led by Chief Minister Himanta Biswa Sarma, has been working to advance the state's livestock sector, which has enormous growth potential. This sector not only provides self-employment opportunities for young people, but it also contributes significantly to the rural economy of our state," he said.

"The vision calls for promoting growth through partnerships, knowledge transfer, and increased market access. Furthermore, the show aims to increase technology adoption and raise awareness about financial planning', Bora explained. He went on to say that, under the visionary leadership of



Prime Minister Narendra Modi and Chief Minister Sarma, the Central and Assam governments have prioritised agriculture, livestock, and allied sectors, and various measures have been implemented to ensure our farmers' prosperity and dignity.

On the other hand, Manoj Saikia, Chairman of the Assam Livestock & Poultry Corporation, stated that they have organised a farmer training programme and seminars. "There are approximately 200 stalls here, and representatives from Delhi, West Bengal, Sikkim, Haryana, Uttar Pradesh, and other states have participated. "We expect over 10,000 people to come here every day," Saikia said.

According to Sikkim Minister Lok Nath Sharma, "We will have to concentrate in this livestock and poultry sector also towards Atmanirbhar Bharat." "This is a good initiative by the Assam government. Sikkim is a state known for its organic farming. "Our government has also launched numerous initiatives for the farming sector," Sharma stated. The Assam Animal Husbandry and Veterinary Department has announced that seminar sessions, exhibitions, interactive sessions, and competitions will be held during the show.

ICAR-KVK's Poultry Training Brings New Beginnings for Conflict Survivors

ICAR-Krishi Vigyan Kendra (Churachandpur, Chandel, Imphal West, Tamenglong, and Ukhrul), in collaboration with the ICAR Research Complex for NEH Region, Manipur Centre, today held a oneday poultry farming training



programme at Sardar Patel High School Relief Camp in Khurkhul, Imphal West district.

Dr. Ram Gopal Laha, Head of Regional Centre, ICAR-RC for NEH Region, Manipur Centre, oversaw the training programme. The training programme involved 37 conflict survivors who were staying at the relief camp.

Dr A Ameeta Devi, Senior Scientist cum Head KVK Chandel, gave a lecture on "Scientific rearing of Poultry birds for livelihood and income generation" during the technical session, while Dr Ch Sonia Devi, Scientist (Poultry Science) and Dr S Sinyorita, SMS (Animal Science) KVK Tamenglong spoke about poultry disease and its control measures.

Dr. V Pravabati Devi, SMS (Home Science) KVK Chandel, spoke on "Post-harvest management of seasonal fruit for sustainable livelihood"

Dr S Roma Devi, SMS (Home Science) KVK Churachandpur, also provided hands-on training in crocheting, knitting, and hand embroidery.

The training programme was organised by Ph Chandramani Singh, SMS (Horticulture), KVK Churachandpur, ICAR-RC for NEH Region, Manipur Centre.

As part of the programme, a newly built Poultry Shed was inaugurated on the School campus. Dr. Ram Gopal Laha also distributed 100 Vanaraja chicks to the conflict survivors who were staying there.

Microbial Risk Assessment Series by FAO/WHO Highlights Food Safety Challenges

The Food and Agriculture
Organisation (FAO) and the World
Health Organisation (WHO)
released reports on microbial
hazards in fruits and vegetables, as

well as measures to control Salmonella in poultry meat. These detailed documents, released as part of the Microbiological Risk Assessment (MRA) series, shed light on potential hazards in various products while also providing insights into effective control strategies.

The FAO/WHO Expert Meetings on Microbial Risk Assessment (JEMRA) conducted extensive research from 2021 to 2022, focusing on hazards in fresh, ready-to-eat, and minimally processed fruits and vegetables. The first report focuses on primary production, including open fields and protected facilities. Context-dependent findings highlight data gaps, particularly in open fields, that exist due to a lack of scientific evidence. Controlled environments, while more manageable, can pose risks if not properly supervised, resulting in cross-contamination.

Data gaps remain regarding the efficacy of water disinfection treatments and post-packaging decontamination interventions. The report emphasises the importance of understanding these aspects in order to maintain process water's microbiological quality and reduce contamination risks.

The complexities of produce storage, distribution, and marketing result in data gaps, particularly in developing economies. Experts emphasise the importance of focusing on retail and food service, which are frequently overlooked segments of the supply chain, in order to improve produce safety education and training.

The poultry meat report emphasises the complexities of managing Salmonella in broilers and poultry meat. Experts believe that a combination of control strategies, such as vaccine-based approaches and stricter biosecurity measures, is the most effective in reducing Salmonella prevalence in the grill production chain.

While vaccine-based strategies lower Salmonella prevalence, they do not eliminate it. Biosecurity, sanitation, and hygiene play critical roles, emphasising the importance of Salmonella-free breeding flocks. High-pressure processing and irradiation emerge as useful interventions, while chlorine-based compounds and organic acids show promise.

The report acknowledges that the science on virulence factors and dose-response curves is incomplete, and it does not cover ducks, turkeys, or other species. Consumer education issues remain unaddressed.

Sowing the Seeds of Change: SRUC Leads Research on Seaweed in Poultry Nutrition

Scotland's Rural College (SRUC) is

researching the viability of a highly desirable red seaweed as a long-term substitute for soybean meal in chicken feed in the United Kingdom.

The Novel Seaweed Chicken Feed Feasibility (NSCFF) project, led by Seaweed Generation in collaboration with SRUC, the University of West London, the Centre for Innovation Excellence in Livestock (CIEL), and Microgrow Systems Ltd., is going to explore the viability of using tank or seacultivated dulse - a protein-rich red seaweed - as a practical and costeffective alternative chicken feed.

It is one of 32 projects funded by Innovate UK and the Biotechnology and Biological Sciences Research Council (BBSRC) to drive transformation in the food industry to meet the needs of a growing population while promoting health and sustainability.

The GBP500,000 (US\$637,400) project will create an automated macroalgal protein cultivation system that will harness the nutritional benefits of seaweed to produce an environmentally friendly protein source for poultry.



Trials will be conducted at SRUC's cutting-edge poultry facility near Edinburgh to evaluate the effect of dulse inclusion on nutrient digestibility, growth, carcass quality, and gut health, providing critical insights into its potential as a sustainable and efficient alternative protein source for chicken feed.

Dulse has great potential due to its higher bioavailable protein content; however, the current challenge is the prohibitively expensive and complex nature of dulse cultivation. Although it can be grown at sea, the complex life cycle complicates the process. In contrast to terrestrial crops, dulse's rapid growth capacity holds promise for providing a long-term supply of biomass suitable for incorporation into poultry diets as a protein source.

The project represents a significant step forward in locally sourced and environmentally friendly poultry nutrition, envisioning a reshaped industry by introducing a cost-effective alternative to soybean meal, thereby reducing the ecological impact of poultry production.

Covenant Animal Health Invests in IntelGenx's Innovative Drug Delivery Platform



IntelGenx Corp. has signed development and licencing agreements with a wholly-owned subsidiary of Covenant Animal Health Partners, LLC ("Covenant Animal Health").

Covenant Animal Health will fund the development and manufacture of a VetaFilm®-based drug, according to the terms of the agreement. The licence agreement grants Covenant Animal Health exclusive rights to use the product in the field for non-human applications. In return, IntelGenx will receive royalties on the product's worldwide net sales.

IntelGenx will manufacture the product on a global scale for clinical development, and the parties intend to enter into a subsequent commercial supply agreement under which IntelGenx will supply the product to Covenant Animal Health.

"We are delighted to expand our Animal Health business with our third collaboration in as many years since we entered the Animal Health market and are pleased to deliver on our corporate strategy," said Mr. Gorham. "This partnership with an industry leader like Covenant Animal Health should help open the doors to several additional commercial opportunities for our proprietary VetaFilm® drug delivery platform, and it reaffirms our belief that the technology could become a standard administration method for companion animals in the future."

"Covenant Animal Health Partners, LLC was formed to provide products to the animal health industry that allow veterinarians to practise better medicine," explained Dr Thomas D. Overbay, Covenant's CEO. "We are excited to work with IntelGenx and believe providing products using improved delivery systems, such as that provided by IntelGenx, will help us achieve that goal."

Wyrick Robbins Yates & Ponton LLP served as Covenant's legal counsel for the transaction.

About IntelGenx

IntelGenx is a leading drug delivery company specialising in the development and manufacture of pharmaceutical films.

IntelGenx's advanced film technologies, such as VersaFilm®, DisinteQ™, VetaFilm®, and transdermal VevaDerm™, enable next-generation pharmaceutical products that meet unmet medical needs. IntelGenx's innovative product pipeline provides significant benefits to patients and physicians for a variety of therapeutic conditions.

IntelGenx's highly skilled team provides comprehensive pharmaceutical services to pharmaceutical partners, including R&D, analytical method development, clinical monitoring, intellectual property, and regulatory support. IntelGenx's cutting-edge manufacturing facility provides full service, from lab-scale to pilot- and commercial-scale production. For more information, go to www.intelgenx.com.

About Covenant Animal Health Partners

Covenant Animal Health Partners. founded in 2018, is committed to the development and registration of "revenue-ready" animal health products. Covenant addresses critical market needs for production and companion animals while also introducing new assets into industry partner portfolios. The company's experienced team of animal health and technology development and advancement professionals has decades of experience with the rapid evaluation, development, and collaboration required to deliver critical solutions to animal health manufacturers and distributors. In addition to its own programmes, Covenant collaborates with animal

health industry leaders to fund, develop, and accelerate external innovation initiatives. Visit www.covenantAH.net.

Rabobank's Updated Poultry Forecast: Lower Prices and Growth in Key Markets



In an updated outlook, Rabobank's poultry report for Q1 2024 predicts a moderately positive year.

Analysts at the financial services firm predicted 1.5% to 2% growth for next year.

Lower input costs should result in lower-priced chicken, boosting chicken consumption in 2024. Rabobank explained that it was a sign of recovery from 2023, when growth was only 1.1%. Southeast Asia, the Middle East, and Latin America are expected to be market growth drivers.

Producers will need to continue balancing supply growth with relatively slow demand growth, particularly in the United States, Thailand, Indonesia, and, more recently, China and the European Union, which are dealing with oversupply.

Consumers would remain price sensitive due to the weak economic context and pressure to provide affordable products to customers through price-driven channels.

According to the report, poultry will continue to benefit from

downtrading in meat type and product category. However, as wages have risen in line with previous inflation, value-based market opportunities will gradually return as consumer price inflation falls. Nonetheless, price-driven markets will remain a challenge for producers in 2024, as the industry will continue to face relatively high costs and volatility.

Feed costs are expected to be slightly lower in 2024. However, ongoing global geopolitical issues such as the Ukraine war, the Middle East conflict, and weather events, in addition to oil and gas prices, may continue to play a role.

The group also stated that the rapid growth in global trade over the previous two years has begun to slow.

Trade will not be easy, but it will continue to grow, primarily in raw chicken meat, and the market will gradually recover as consumer spending power improves in several key markets, including the EU, UK, and US, according to the report.

Later in the analysis, Rabobank recognised the impact avian influenza could have on the poultry market in 2024, particularly given its previous impact on production and trade in the United States and Europe.

During the winter months, cases in commercial farms across the United States, Canada, and Mexico, particularly in turkeys and layers, are still being reported. In Europe, cases have been reported in production countries such as the United Kingdom, the Netherlands, Germany, Denmark, France, and Hungary.

The relatively early outbreaks in the Northern Hemisphere winter season should serve as a wake-up call for the industry to maintain high biosecurity standards.

According to the report, given the steady price-driven market context, high and volatile input costs, and avian influenza risks, producers should focus on efficiency, procurement, and biosecurity. However, increased spending power should boost demand for premium and value-added products.

Evonik's Biotech Hub Drives Research for Antibiotic Alternatives in Poultry Nutrition



Evonik's Biotech Hub is collaborating with the Technical University of Munich (TUM) and RWTH Aachen to create a novel bacterial consortium to strengthen chickens' immune systems and prevent pathogen colonisation of their intestinal tracts. The goal is to improve health and reduce the use of antibiotics. Evonik serves as both a partner and project coordinator for the three-year joint Chicken Synthetic Microbiota (ChiSYN) project. The total project volume exceeds €2 million, which is funded pro rata by the project partners and the Federal Ministry of Food and Agriculture (BMEL).

The project partners' goal is to create a prototype feed additive that ensures that "beneficial microorganisms" colonise the gut of chicks. To accomplish this, bacteria that strengthen the immune system and make pathogen colonisation more difficult are chosen from a diverse population of chickens. The project partners then combine the microorganisms to form a new consortium.

In this project, Evonik's industrial biotechnology experience is perfectly complemented by the skill sets of its strategic partners at Aachen and Munich universities.

RWTH has many years of experience systematically collecting and investigating bacterial communities in the gastrointestinal tracts of humans and livestock, as well as isolating and characterising gut microbiota using high-throughput methods.

TUM investigates the impact of specific bacteria on the health of chickens. It focuses on the development of the chicken immune system and how it interacts with pathogens.

ADM Expands Footprint in Southeast Asia with Acquisition of PT Trouw Nutrition Indonesia

ADM has agreed to acquire premix manufacturer PT Trouw Nutrition Indonesia, a Nutreco subsidiary. The acquisition includes two premix production facilities, the Pasuruan site in Surabaya and the Cibitung site in Jakarta, as well as laboratories, warehouses, and



offices throughout Indonesia. The US company has not disclosed the deal's value.

The acquisition will strengthen ADM's regional footprint by allowing them to expand their premix production capabilities, ensuring that they are well-positioned to quickly provide localised solutions and customised services to customers in Indonesia and the wider region. ADM operates eight facilities in Asia Pacific, including five premix plants in China, one premix facility in Vietnam and the Philippines, and one feed additive facility in China. Their total production capacity in the APAC region is approximately 1.2 million metric tonnes per year, which includes complete feed, premix, agua feed, pet food, and feed additives. From their Asian plants, they serve customers throughout Asia, Oceania, and Africa.

As Southeast Asia's largest protein market, Indonesia's market outlook is expected to grow steadily, in line with rising animal protein consumption and population growth. Increased economic development is linked to more animal protein, particularly from poultry and eggs, which may displace fish, the region's traditional source of high-quality protein. Higher consumption of red meat and dairy is linked to modern urban living and higher socioeconomic status.

UNEP Report Champions Novel Alternatives: A Path to Sustainable and Healthy Food Systems



A new assessment by the UN Environment Programme (UNEP) highlights the potential of novel meat and dairy alternatives to reduce the environmental impact of the global food system. The assessment focuses on three types of alternatives: novel plant-based meats, cultivated meat from animal cells, and protein-rich products derived through rapid fermentation by microorganisms. These alternatives have the potential to significantly reduce greenhouse gas emissions, land degradation, deforestation, water and soil pollution, and loss of biodiversity. They could also help address animal welfare concerns and reduce the risks of zoonotic

diseases and antimicrobial resistance.

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

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

Novel alternative foods have the potential to reduce harm to farm animals and improve public health. However, some plant-based products may be highly processed and contain high amounts of salt and saturated fats. The health impacts of using cultured meat from animal cells or fermentation are still not well understood.

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

The report also emphasizes the need for a just transition to a more sustainable food system. It recommends policy options such as greater support for open access research and commercialization, shifting subsidies and tax rebates to favor novel alternatives, and internationally agreed mechanisms on trade policies and food safety standards. The authors stress the importance of open and transparent research to understand the nutritional and socio-economic implications of these alternatives in different regions.

It is important to note that the report does not consider alternatives such as regenerative livestock farms, feed additives, farming insects, reduced meat consumption, or taxing meat. While these alternatives are being pursued alongside the three examined in the report, they have faced challenges in gaining government support and achieving impacts at scale.

Overall, the assessment highlights the potential of novel meat and dairy alternatives to reduce the environmental footprint of the global food system. By addressing climate change, biodiversity loss, pollution, and public health challenges, these alternatives can contribute to a more sustainable and healthier future. However, further research, government support, and policy measures are needed to unlock their full potential and ensure a just transition to a more sustainable food system.

Karnali Province Implements Animal Welfare Standards to Promote Ethical Practices



The Karnali provincial government has implemented the Animal Welfare Standards 2080. To ensure animal welfare, the Ministry of Land Management, Agriculture, and Cooperatives has implemented standards in accordance with the Animal Health and Animal Services Act, 2055, and its spirit.

It recommends good production practices, such as proper animal breeding management. Speaking at a discussion to promote the use of the standards, which went into effect on December 20, secretary of the ministry Narahari Prasad Ghimire stated that the provincial government implemented the standards to promote good practices in the animal husbandry sector. Dr Ghimire also urged animal traders to follow the standards to ensure that no cruelty occurs during animal rearing, transportation, or sale.

Sneha Shrestha, president of Sneha's Care Lalitpur, stated that the Karnali province government's standards will aid in increasing the production of animal and poultry products, increasing hygiene, reducing extreme cruelty to animals, and improving overall animal welfare.

The standard includes the right to protect animals from hunger, thirst, and malnutrition, as well as from fear, panic, and stress, as well as physical cold and heat discomfort, pain, injury, and disease, while respecting their right to live in their natural environment. Dr. Bimal Kumar Nirmal, Managing Director of Nepal Farmers Advisory Council Pvt. Ltd., praised the provincial government for recognising the long-running campaign to promote animal welfare.

CAHFS at University of Minnesota Secures \$4.99 Million Grant from Gates Foundation to Strengthen Veterinary Services in East Africa

The Center for Animal Health and Food Safety (CAHFS) at the University of Minnesota's College of Veterinary Medicine has received a \$4.99 million grant from the Bill & Melinda Gates Foundation. The grant aims to support veterinary services capacity-building in East Africa over a period of seven years. The goal is to strengthen the evaluation, revision, and monitoring of disease control programs in the region through group training and workforce development.

East Africa is home to more than 50% of the continent's livestock. National veterinary authorities and personnel in the region are responsible for regulating and promoting animal and livestock health, as well as food safety. Strengthening the veterinary service

workforce has the potential to improve food systems, public health, and economies in the participating countries. The training program, which will be launched later this year with the support of the grant, aims to foster collaboration among countries to develop harmonized regional approaches for livestock health and food hygiene standards.

This new grant builds on a previous \$1.5 million grant from the Bill & Melinda Gates Foundation that supported the development and implementation of ProgRESSVet East Africa. This program is an eLearning initiative for veterinary services personnel on key topics in animal health and food safety. The initial investment allowed 74 participants to receive online and applied training on important issues such as disease surveillance, risk analysis, animal traceability, and laboratory capacity. The new funding will deepen the learning programs in Kenya and Uganda and expand the program to other countries in the region.

ProgRESSVet East Africa is part of CAHFS' capacity-building program for

veterinary service professionals. The program has been offered in 11 countries to date, with nearly 200 program alumni in South and Central America, Southeast Asia, and East Africa. It aligns with the Center's role as a designated World Organization for Animal Health (WOAH) Collaborating Centre for Veterinary Services Capacity Building and its mission as a Veterinary Public Health Reference Center for the Food and Agriculture Organization of the United Nations.

Key partners in the design and implementation of ProgRESSVet East Africa include Makerere University's College of Veterinary Medicine, Animal Resources and BioSecurity, the Ugandan Ministry of Agriculture, Animal Industry and Fisheries, the Kenya Directorate of Veterinary Services, the Kenya Women's Veterinary Association, the Kenya Veterinary Board, and the Uganda Veterinary Board. These organizations support ProgRESSVet East Africa as an official provider of continuous professional development for practicing veterinarians in each country.

INDIAN HERBS SPECIALITIES Pvt. Ltd. (Manufacturer & Exporter of Herbal Health Products)

The Pioneer & Market Leader in Herbal Animal Health Care Products Industry invites applications for the following post:

MANAGER TECHNICAL (NORTH ZONE): The candidate should be MVSc (Poultry / Animal Nutrition) with specialization in Poultry Nutrition and having 3-4 years experience in similar field. The candidate should also have good cordial relations with the customers / consultants.

We provide best working environment to our employees. Emoluments (Salary and Incentives) shall be highly attractive and shall commensurate with the best in the industry. Interested candidate may send their resume at-

anand.gupta@indianherbs.in ihspl@indianherbs.org

ANAND GUPTA (Sr. Manager H.R.)

INDIAN HERBS SPECIALITIES Pvt. Ltd.

C-215, 2nd Floor, Elante Offices, Plot No. 178 - 178A, Industrial & Business Park, Phase - 1, CHANDIGARH (U.T.) - 160002 Ph. No. +91 8279560007, anand.gupta@indianherbs.in / ihspl@indianherbs.org

POLYZYME

FS-SSF enzyme complex for optimum feed digestion

Redefining the concept of enzymes in feed nutrition



For any enquires please mail to : info@zeusbiotech.com

www.zeusbiotech.com

Editorial Calendar 2024

Publishing Month:

Publishing Month:

January February March Article Deadline: Article Deadline: Article Deadline : Article Deadline: 28th, Dec. 2023 28th, March 2024 28th, Jan. 2024 26th, Feb. 2024 Advertising Deadline: Advertising Deadline: Advertising Deadline: Advertising Deadline: 30th, Dec. 2023 30th, Jan. 2024 30th, March 2024 28th, Feb. 2024 Focus: Focus: Focus: Focus: **Summer Stress Opportunities and Budget Disease Prevention** Management **Challenges** Publishing Month: Publishing Month: **Publishing Month: Publishing Month:** June July August Article Deadline: Article Deadline: Article Deadline: Article Deadline: 28th, April 2024 28th, May 2024 28th, June 2024 28th, July 2024 Advertising Deadline: Advertising Deadline: Advertising Deadline: Advertising Deadline: 30th, April 2024 30th, May 2024 30th, June 2024 30th, July 2024 Focus: Focus: Focus: Focus: **Cold Chain Nutrition Biosecurity** Sustainability **Publishing Month: Publishing Month: Publishing Month:** Publishing Month: September October **November** December Article Deadline: Article Deadline: Article Deadline: Article Deadline: 28th, August 2024 28th, September 2024 28th, October 2024 28th, November 2024 Advertising Deadline: Advertising Deadline: Advertising Deadline: Advertising Deadline: 30th, September 2024 30th, August 2024 30th, October 2024 30th, November 2024 Focus: Focus: Focus: **Egg Production & Processing & Winter Stress Food Safety Processing Packaging** We wish to subscribe the following **Subscription Rates** Poultry Planner **Poultry Times of India** Time Period □ 1 Year □ 3 Year □ 5 Year □ 1 Year □ 3 Year □ 5 Year 1 Year INR 2400 USD 250 INR 6500 USD 650 3 Year Dairy Planner Grand Total: _____ □ 1 Year □ 3 Year □ 5 Year INR 10000 USD 1000 5 Year _to_ *18% GST Extra **Payment Details:** Contact Name : 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, Company Name: _ KARNAL - 132001 (Haryana) INDIA or Transfer money to Canara Bank Postal Address : ___ Bank address: Sector 12; U Estate Karnal Account Type: Current ___ State : ___ __ Mob. No._ Account Name: Pixie Expomedia Pvt. Ltd. Account Number: 120000991579 Postal Code: ___ _ Country : _ IFSC Code: CNRB0003264 | Swift Code: CNRBINBBBFD | PAN No. AAMCP6787A For more detail, contact: 5 Date:_ Company's Stamp & Signature Pixie Expomedia Pvt. Ltd. C/o OmAng Hotel, Namaste Chowk, Near Janta Petrol Pump, KARNAL - 132001 (Haryana) INDIA pixie expomedia By signing this form I acknowledge that I have read and agree to the quoted cost above CREATE • CONNECT • CONQUER *5% GST Extra Advertisement Tariffs **Advertisement Type** Single Issue (cost @) **Advertisement Type** Single Issue (cost @) 30000 □ **Back Title** 20000 🗆 Front Page Front Gate Fold 25000 □ Back Gate Fold 19000 □ Front Title Inside 20000 □ Back Title Inside 18000 □

16000 □

8000 ☐ Center Spread

Back Title Opening

Publishing Month:

Publishing Month:

April

16000 □

18000 □

Full Page

Front Title Opening



MODE OF ACTION

being.

ASTICON-SDS serves as an important antioxidant to protect biological membranes against peroxidative damage in tissues and sub-cellular fractions, improves the bird's cardiac muscle function significantly and acts as a trigger to activate energy liberation in deteriorating mitochondria, thereby reverse the fluid accumulation in the abdomen.

COMPOSITION

Alpha Lipoic Acid, Resveratrol, Mecobalamine, Folic Acid and Betaine Anhydrous.

1g/25 birds and 400g/MT of feed.

PRESENTATION

5Kg and 25Kg poly-coated paper bags

SHELF LIFE

3 years from the date of manufacture

BIOSINT[®]

For Further Details BIOSINT NUTRACEUTICALS.

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

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

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

e-mail: info@biosintnutraceuticals.com, www.biosintnutraceuticals.com



GUPTA AGRO INDUSTRIES

Gupta Agro Industries Gali No. 1 Anand Vihar under Railway flyover Hansi Road KARNAL 132001 Email: guptashiraz@gmail.com | Mob: 98120 52121



Ultimate Solution... for Liver Protection





Multiple action and Versatile benefits

For further information please contact:

VENKY'S (INDIA) LIMITED

ANIMAL HEALTH PRODUCTS DIVISION

An ISO 9001 Certified Company

Venkateshwara House, S. No. 114/A/2, Pune Sinhagad Road, Pune 411030.

Tel.:+91-20-24251803, Fax: +91-20-24251060 / 24251077, E-mail: ahp@venkys.com Website: www.venkys.com

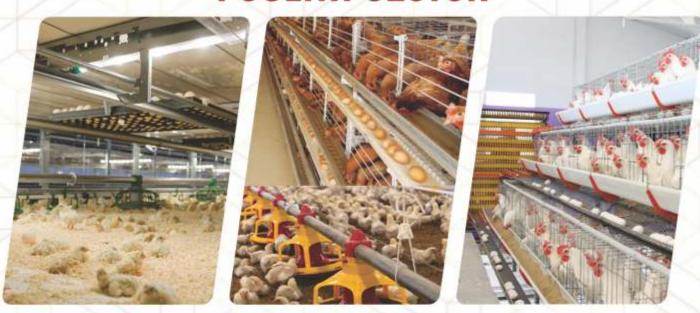


08-10 August 2024

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

INTERNATIONAL EXHIBITION ON

POULTRY SECTOR



Event Highlights



100+ **Exhibitors / Sponsors**



Countries



100 +**VIP Attendees**



Extensive Media Coverage



5000 +**Visitors**

Exhibit Profile

Breeding, artificial insemination, embryo technology | Feed and feed ingredients | Feed additives | Feed Machinery | Feeding System | Veterinary Medicine and Vaccine | Veterinary Examination | Smart livestock farming | Egg grading, washing, packaging | Incubation | Environmental Control system | Poultry Farming Equipment | Farm Disinfection | Farmland Design and engineering | Livestock house solar energy system | Biogas Technology | Animal waste recycling management | Facilities with Animal Welfare | Wastewater treatment | Meat Products | Cold Rooms & Allied Equipment | Cage culture equipment | Poultry farming equipment and many more...

Event by



Supported by







Knowledge Partner







Concurrent Events



Media Partner