

65th National Symposium 2024

Day 2 – Symposium Proceedings

The Second Day of the CLFMA OF INDIA's 65th National Symposium 2024 began with a welcome addressed by Mr. Suresh Deora, Chairman of CLFMA OF INDIA.



Mr. Suresh Deora, proudly announced the CLFMA OF INDIA's newly elected leadership team for 2024-2026 term. Following the election, the new Managing Committee and Office Bearers of CLFMA OF INDIA officially took the charge. The newly elected Chairman for the period 2024-2026, Mr. Divya Kumar Gulati, Managing Director of Nurture Technology, now leads the association, supported by other newly elected office bearers, an experienced and capable team, committed to driving innovation and growth in the Indian livestock sector.

In his acceptance speech, Mr. Divya Kumar Gulati expressed his gratitude for the opportunity to lead CLFMA OF INDIA and emphasized his commitment to advancing the livestock industry. Dr. Raghavendra Bhatta, Deputy Director General (Animal Science), ICAR Headquarters, New Delhi, Dr. P.S. Mahesh, Joint Commissioner and Director of the Center of Excellence for Animal Husbandry (CEAH), Bengaluru, Dr. Gajan Garg, Deputy Commissioner (Trade), Dr. Hans Raj Khanna, Joint Commissioner (NLM), and Dr. Sujit K. Dutta, Joint Commissioner (AH), were felicitated by Mr. Suresh Deora in recognition of their valuable contributions and work in the livestock industry.

Dr. Devender Hooda, North Zone President-I, CLFMA of India, welcomed and introduced the moderator and panelists on the stage.

Session I:

The First Session was titled “**Managing Input Costs and Exploring Alternatives**”

Moderator: Mr. S. V. Bhave, Past Chairman, CLFMA of India

Speakers/ Panelists:

Mr. Reece H. Cannady, Director, U.S. Grains Council

Mr. Ajay Jhunjunwala, President, SEA OF INDIA

Ms. Anupa Velusamy, MD, GFFCO Global Private Limited

Dr. Prashant Shinde, Managing Committee Member, CLFMA of India



Session Highlights:

The second day of the symposium commenced with registration, followed by a warm welcome from Chairman, Mr. Suresh Deora. Dr. Devender Hooda, North Zone President reminisced about his college days, noting how modern narratives are evolving beyond the traditional tales of "once upon a time, there was a poor farmer in a village." He highlighted that India's agricultural and livestock sectors are playing a significant role in the country's emergence as a global economic power.

In his opening speech, Mr. S. V. Bhave, Past Chairman of CLFMA OF INDIA, stated that in the last two years, the dynamics of carbohydrates in the animal feed industry have changed significantly, necessitating the exploration of alternative raw materials. He added, "The prices of carbohydrates and fats in the livestock industry are linked to fuel

oil prices. Therefore, we must acknowledge that if fuel oil prices increase, the cost of our raw material sources will also rise. We need to explore alternative raw materials that can be used as feed ingredients in the industry," explained Mr. S. V. Bhawe.

Mr. Reece H. Cannady, Regional Director, U.S. Grains Council

Mr. Reece H. Cannady, Regional Director of the U.S. Grains Council, highlighted the importance of sorghum and DDGS as feedstock in India and how the same can be viable ingredients for the livestock industry. He emphasized the need for the animal feed industry to explore ways to make a shift towards these alternatives. He stated, "We want to see growth in the animal feed sector. There have been noticeable changes in the feed industry, particularly with the use of corn in the ethanol sector and the impact it has had. Alternatives like sorghum, also known as jowar, can serve as replacements." India is no stranger to sorghum, as it is still used in traditional dishes like khichdi.

Pointers:

1. "In the US, there is a huge industrial sector which cultivates sorghum which is considered as an important cash crop."
2. "India used to produce more sorghum as compared to the US, but today, US leads followed by Nigeria and on the third level are India. US are currently the largest exporter of Sorghum in the world. Majority of the export goes to China's feed market in place of maize."
3. "Sorghum can be replaced in place of maize for animal feed."
4. "US Sorghum is primarily 'yellow grain sorghum' and can replace the corn 100% in poultry diets, which can be used as a supplement to corn in poultry rations. Sorghum DDGS also do exists and can be used in dairy rations up to 25%."
5. "It is tannin free. It has higher protein content than other varieties of sorghum. "We find 98% of the value of corn depending on which species the animal is."
6. "US sorghum is non-GMO, which means exporting it can be a great solution. It is drier than other countries' sorghum, so it stores and can be transported well."
7. "In 2024, India likely to use 5 MMT of corn for ethanol production, this means that there will be over 1.6 MMT of corn DDGS available in the country – and that number is likely to grow in the coming years."
8. "Aflatoxin has been a concern in India, but is not a concern for imported products. Form relationships with suppliers and test the product."

Mr. Ajay Jhunjunwala, Managing Director - J. R. Agro Industries Pvt. Ltd. and President, The Solvent Extractors' Association of India (SEA)

Mr. Ajay Jhunjunwala, Managing Director of J. R. Agro Industries Pvt. Ltd., and President of the Solvent Extractors Association of India (SEA), stated, "There is a significant focus on vegetable oil, and as you know, India is dependent on imports for 65% of its edible oil needs. Additionally, we require an extra 1 million tons of vegetable oil every year, which is a huge challenge." He added that the primary reason for this is the low yield of oilseeds

in India, which is roughly around 35-40 percent of the world average. In summary, he mentioned that for the next two years, the feed industry is expected to perform well.

Pointers:

1. "Major oil seeds crops like rapeseeds, soya, rice bran and now we have a palm oil mission also in India."
2. "In India, we have low oilseed production because we are not paying our farmers good prices and we are unable to maintain MSP announced by the government in case of soya in particular."
3. "Recent duty hikes in vegetable oil, is 20% from present 5.5 and government has taken this major action just to motivate the oil seed farmers and particularly for soya, so that our production and acreage increases."
4. "MSP for the prevailing prices for soya seed has gone to Rs 44 a kg to Rs 48 to 49 rupees a kg."
5. "We have a national mission on oil seeds as well as national mission on palm also."
6. "Factors that affect the oil seeds are weather conditions, global warming, carbon credit policies, UDR which is reducing land and resources, crude petrol linked to bio-diesel, biodiesel mandates. The two major economies of vegetable oil/meal is Brazil and Indonesia."
7. "Another factor is the forex result and the geopolitics scenario, US elections."
8. "Statistics show at SCA is that soya is will increase all over the world and experts say that at least 15 million tons of extra soya meal will be imported this year from Brazil, Argentina, and USA."
9. "Soya, is expected to have a better crop this year, expanding to Karnataka, Maharashtra, even in Gujarat. Meal production will be around 8 million tons."
10. "We recommend that the government should go for Genetically modified (GM) crops. It is learnt that GM is not necessarily required to hike production. The GM variety gives stability of production, the pest resistance of the seed and other qualities."
11. "Rapeseed exports are coming down gradually and it is recommended that the government must give a subsidy for exports."
12. "Ethanol is not good for feed industry, because it takes out the energy from the maize. But biodiesel is good for the feed industry. Producing more biodiesel means producing more meal."
13. "In rapeseed meal, the acreage is going up because of the good prices. Hence, the production will be in abundance. However, because there is a problem of bitterness and the uses limitation - the scientist will have to work on this aspect."
14. "SCA is tying up with institute like (Indian Institute of Toxicology Research) IITR to solve this problem."
15. "Rice grain meal is dependent upon the government procurement of paddy and the it's processing. It is related to government intervention. However, the crop is good."
16. "Groundnut is increasing to 15%, however the cotton production is reducing."

Ms. Anupa Velusamy, MD, GFFCO Global Private Limited, is a trailblazer in Organic Waste Management and a pioneer in Black Soldier Fly Larvae (BSFL) farming.

Ms. Anupa Velusamy introduced BSFL (Black Soldier Fly Larvae) farming, emphasizing its innovative approach to waste management. She explained, "In India, processing wet waste is crucial. BSFL can effectively process various types of organic waste, including slaughterhouse waste and vegetable scraps." She further noted, "BSFL is an emerging industry, and its farming practices are evolving. Unfortunately, India is about a decade behind compared to the rest of the world. However, if we can catch up, the growth potential will be rapid."

Pointers:

1. "The biomass of BSFL is an excellent protein source. It has a good immunity booster, which is perfect for the livestock industry."
2. "Why to use BSFL? The reason is it doesn't compete, it doesn't require any feed ingredients or feed source to be processed."
3. "It is nutritional and not a pest."
4. "The larvae are small in size, which ignores the storability and in form of a pellet. So, BSFL can directly feed to livestock."
5. "It has a wide spectrum of amino acids, fatty acid profile and very high in lactic acid. This will impact the immunity booster for the livestock."
6. "Being an insect protein, there are certain parameters which needs to be analysed. For protein test in insect-based source, the protein extraction is slightly different. There needs a detailed focus on trials to exactly know the potential of BSFL."
7. "It is invariable for all the livestock - from aqua to cattle, swine - certain percentage of inclusion has been recommended."
8. "The three main factors that BSFL as a supplement is the antimicrobial peptides. Chitin to certain extent is again antimicrobial activity is being imposed. And lubricant content very similar to coconut oil. It would be animal source fat where lubricant content is high."
9. "Even biogas units would not be able to handle the mixed waste that we have, especially generated in the urban area - where this particular insect efficiently processes."
10. "India has a favourable climatic condition and we don't require a controlled unit like it is in other part of the world."
11. "There could be contamination of DDGS before transportation or in storage. These products can be fed or given a second life with BSFL because BSFL can process and nullify the toxins or contaminations that material has and we can use that biomass again to the feed. So that is the magic happening in the BSFL microbiota, the gut microbiota."
12. "BSFL is, when each process from light to dry and from dry to de-fatted meal, each process increases the economic cost involved. BSFL being a pellet in itself can be used directly as a live or in frozen format."

Dr. Prashant Shinde, Managing Committee Member, CLFMA OF INDIA, representing Dairy industry in formulation of BIS standards for Compound Dairy Feed.

Dr. Prashant Shinde emphasized that DDGS (Dried Distillers Grain with Solubles) is one of the best ingredients available in terms of nutrients for the livestock sector. He noted that DDGS contains a high amount of protein, energy from fat, and is a good source of phosphorus. However, he acknowledged that there are challenges as well, including variability in protein and fat content, as well as differences in colour ranging from golden yellow to darker shades of brown. "The key point is that distillers need to invest in learning to standardize their processes," he added.

Pointers:

1. "With aflatoxin in DDGS, with over 100 samples, it is believed that it will cause serious risk to humans in the long run."
 2. At this moment roughly 1.5 million tonnes of DDGS is being produced."
 3. "It will make its way into poultry, which will use around 2%-3% or max 5 %, and due to the high toxin levels - the sector will not be able to afford it."
 4. "The concern is about it entering the market through unorganised dairy sector."
 5. "Those who are using the quick scan methods should migrate to HPLC methods"
 6. "In Vitro Protein Digestibility (IVPD) or amino acid digestibility, and the best is 79% digestibility, which is standardised, in the US as well, but if an average is considered, IVPD of 2.5 translate into amino acid digestibility of 50."
 7. "As feed millers, there is a need to think beyond ingredients. We have to focus on nutrients, and what do we need from that ingredient right. We need starch, sugar and amino acids - the focus should shift from ingredient mind set to nutrient mind set."
 8. "Among Indian cows - Rumen pH is really low because of the feeding management, various aspects right, so under low pH or acidic pH conditions this linoleic acid 18-2 converts into CLA. CLA even at the quantities of 4 grams can cause a significant drop in milk fat from say by 20-25%, that is significant, cow milk fat of 4 can drop down to 3.2."
 9. "Farmers are paid or they get paid based on fat and SNF (Solids not Fat). If you translate this even 100 grams of quantity digest can cause this milk fat depression. This is significant and needs to be looked at."
 10. "This is an opportunity for distillers to take out this fat and it can be used in different industries, biofuel others, that will also add more value to this ingredient by increasing the protein to 40-42%."
 11. "Due to over-handling, pellets tend to get soft, easily broken down, so the PDI (Pellet Durability Index) is reduced, the pellet hardness is reduced, a lot of fines increase in bag. The feed bag produced at the plant is dropped and picked up at least 4 times - causes a lot of fines."
 12. "There is a need to think beyond ingredients, beyond proximate as well, a need to use the latest technologies and use new tools available."
 13. "We are all are learning and DDGS is new to us hence there is more research needed."
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Session - 2

The Second session was titled – “Leveraging Emerging Technologies for Efficient Livestock Management & Retailing”.

Moderator: Dr. Dinesh Bhosale, Past Chairman, CLFMA OF INDIA

Speakers/ Panelists:

Mr. Narendra K. Pasupathy, Founder and CEO of Nandu’s Chicken

Mr. Nikhil Chitale, Managing Partner, Chitale Dairy

Mr. Balasubramaniam V, General Secretary, Prawn Farmers Federation of India



Session Highlights:

Dr. Devender Hooda, North Zone President I of CLFMA of India, welcomed the panelists and moderator to the stage. They were presented with bouquets, shawls, and mementos as tokens of appreciation by Dr. Saikat Saha, Mr. Nissar F. Mohammed, and Dr. Vijay Makhija for their valuable contributions to the symposium.

During the session, the panelists discussed the branding, retailing, and marketing of livestock products. The focus was on leveraging emerging technologies for efficient livestock management and retailing.

Mr. Narendra K. Pasuparth, Founder and CEO of Nandu's Chicken

Mr. Narendra K. Pasuparth, Founder and CEO of Nandu's Chicken emphasized the importance of incorporating technology into retail stores, stating, "It's changing how customers shop and how businesses operate. Tech is all-pervasive; a complex business like ours cannot run without it." He cited examples, saying, "Managing retail staff can be a hassle—it can be overwhelming. However, with the right systems in place, we can act in real time." Mr. Mr. Narendra K. Pasuparth has followed in his father's footsteps in the poultry industry, which was started by his father in 1963 in Bangalore.

Pointers:

1. "We have 100% traceability and have over 6 lakh consumers. They also sell products like nuggets and popcorn along with chicken 65 or curry leaf pepper chicken - in the value added section."
2. "We supply around 100 tons is what we supply to them on a monthly basis."
3. "We use cameras in our retail outlets which are image processing and we get about 8 different parameters to analyse consumer behaviour."
4. "We use a lot of business analytic tools like power BI which enables our retail team to take real time decisions. We are able to see our business's status in terms of revenue, profitability, gross margins within a lag of 2 hours."
5. "We have another system that can give real time access to the financial performance which is in real time."
6. "There is work done with many AI start-ups and building models to check the quality of especially fish. We are working with sensors, image processing to ensure that there is another layer beyond just human inspection."
7. "There are industrial apps, ensuring that the SOPs at the outlets are followed. The area managers are intimated if anything is missed."
8. "At the core, we have our own ERP which capture everything from production - to sales."
9. "We also built our own point of sale system and are switching over to Microsoft Dynamics."
10. "We have our own e-commerce system which is the mobile app and the website that's integrated together with the boss and the ERP."
11. "We have built a cloud data infrastructure, where we host all our operational data, sales data - which took over a month to put in place. This populates the architecture and because of this Power BI is able to extract the data in almost real time because it gets populated every two hours."
12. "We have CRM solutions that help us in remarketing on a monthly basis close to about crore and a half of our revenue. We do about 11.5 to 12 crores a month in revenue, which comes from remarketing from our CRM system. This includes communication to the end consumer through WhatsApp, emailers, SMS's, etc."
13. "We have the indenting and sales forecasting engine. This is something which we co-developed with Amazon. We were one of the early start-ups to actually use AI and machine learning. In this, we feed the data into the model along with other parameters. The model is able to predict with around 90 plus percent accurate."
14. "We have another app which ensures SOPs are maintained, store operating SOPs etc."

Mr. Nikhil Chitale, Managing Partner, Chitale Dairy is the fourth-generation business partner at the 85-year-old Chitale Group.

Mr. Nikhil Chitale, Managing Partner of Chitale Dairy, reflected on his family business and mentioned his great-grandfather, who started the venture in 1939 in a small village near Gulabpur in the Sangli district. "This business required two essential elements: water and a mode of transportation, which was the railway," he explained. "Today, the plant processes around a million liters a day." Currently, the brand operates across four continents: Europe, the Middle East, Southeast Asia, and the U.S.

Pointers:

1. "Rising cost of milk is a big issue in India at the farmer's end as well as the consumer end - mostly because of low yielding cattle, especially due to no proper feed available and transportation costs."
2. "To find the right genetics, we are collaborating with ABS (American Breeding Services) and Genus is a British company - which are one of the largest genetics provider in the world."
3. "In our dairy farms, we produce around 5 million semen straws a year and out of which a million are sex-sorted semen straws and they are distributed across the country. Punjab, Haryana Tripura, and Jammu and Kashmir have purchased these semen straws."
4. "India has about 57% of the world's buffalo and 16% of the world's cattle population - yet the milk productivity is low - due to imbalanced feeding to animals, rising cost of maintenance and lack of education and awareness about genetics."
5. "We have launched world-class facility, Chitale Genus ABS (India) Private Limited - Brahma - Dairy Genetic Facility to study and improve the cattle genomically. The stud farms has 116 genetically superior jerseys and indigenious (28:27) breeds like Sahiwal, Red Sindhi, Gir and Murrah."
6. "The semen of these high pedigree bulls is collected and transferred to the lab through pneumatic tubes, which makes the process faster and contamination free."
7. "The calves should be more productive than their mothers; hence Chitale Dairy's ultramodern lab also works on sorting semen too."
8. "Chitale Dairy has a program called Cows to Cloud, here 10,000 cattle are tagged in the system, where the health and feeding data is monitored."
9. "Around 140 livestock supervisors are based on the field with scanner and the data is provided to the farmers with information on their cattle."
10. "Training programs are organised for the farmers and labs are set up to improve disease management. We are exploring these ultrasound techniques to improve mastitis and tissue regeneration."
11. "India needs to collaborate with farmers to be able to produce as much maize as possible."

Mr. Balasubramaniam, General Secretary of the Prawn Farmers Federation of India.

Mr. Balasubramaniam, General Secretary of the Prawn Farmers Federation of India stated that India, as the youngest industry in poultry and dairy, India is the second-largest producer and exporter of shrimp in the world. "We have been practicing scientific farming for only about 40 years, and I have personally been involved in it for around 30 years. Until COVID-19, we were the top producers. However, recently, Ecuador, a country in South America, has surpassed us due to advancements in genetics."

Pointers:

1. "Shrimp in India are produced largely from Andhra Pradesh, which is about 70%. Majority are small and marginal and medium farmers."
2. "Genetics is playing a very strong role."
3. "We have introduced SPF (Specific Pathogen Free) animals, because India was settling a lot of pathogens in the system and aquatic animals are very difficult to treat. Especially viral diseases and Microsporium diseases."
4. "In 2009, the Government of India introduced SPF animals and then from 65,000 tons we have hit 1 million tons in production."
5. "Government of India invested in an organisation called SEBA, and more research and work needs to be done."
6. "Farmers and the industry are on a survival mode. The production is happening but not in terms of money. This is a reason farmers are going back to the basics."
7. "The good thing about shrimp is - the larger the size, the better the price. Hence, farmers are cutting down volumes and increasing the sizes of the shrimp. This will help survive the difficult time."
8. "There is a focus on better quality seeds and seed genetics inconsistency, is a very big issue."
9. "High operational cost as funding for the sector is still like any other farming which is low fund availability, for even new technology adoption."
10. "Farmers' Federation should get together and start pushing shrimp into the domestic market. We need a substantial market to be created - it will happen only through a mechanism where consumers are assured consistent quality, consistent pricing and consistent availability."
11. "We need to support Indian farmers to stabilise the prices and once there is a domestic market it can absorb whenever there is over production."
12. "Designing Shrimp Experience Centres, is the need of the hour, where you can visit, eat, enjoy, buy, take home and cook it yourself."
13. "We are trying to transport live shrimp without water to our retail stores and then provide them in water and sell it to the customers."
14. "Freeze dried shrimp is another fantastic product where the whole shrimp is just freeze-dried and when you want to use it, you just put it in hot water, it comes back to life."

As the Session II came to an end, it was finally time to reveal the new set of office bearers who will take continue its mission of strengthening the livestock industry and fostering innovation, sustainability, and collaboration across sectors. On September 21, 2024, the new Managing Committee and Office Bearers of CLFMA of India, officially took the charge, following the election. The newly elected Chairman for the period 2024-2026, Mr. Divya Kumar Gulati, Managing Director of Nurture Technology, leads the association along with the other newly elected office bearers, an experienced and capable team, committed to driving innovation and growth in the Indian livestock sector.

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



CLFMA's New Leadership Team 2024 - 2026:

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

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



9. **East Zone President:** Mr. Balaram Bhattacharya: Avitech Nutrition Pvt. Ltd.
10. **West Zone President:** Dr. Saikat Saha: Evonik India Pvt. Ltd.
11. **North Zone President:** Dr. Devender Hooda: Huvepharma SEA (Pune) Pvt. Ltd.
12. **South Zone President:** Mr. P. Saravanan, Swathi Hatcheries Pvt. Ltd.

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

13. **Mr. Rajneesh KR Jha:** Anmol Feeds Pvt. Ltd.
14. **Mr. Vijay D. Bhandare:** Bhavani Agrovet Pvt. Ltd.
15. **Dr. Prashant Shinde:** Cargill India Pvt. Ltd.
16. **Dr. Saikat Saha:** Evonik India Pvt. Ltd.
17. **Capt. (Dr.) A.Y. Rajendra:** Godrej Agrovet Ltd.
18. **Mr. Anushrav Gulati:** Herbs & Health Biotech Pvt. Ltd.
19. **Dr. Vijay Makhija:** Intervet India Pvt. Ltd.
20. **Mr. K A Sujit Chandan:** Komarla Feeds & Foods Pvt Ltd
21. **Mr. Anil M:** KSE Limited
22. **Mr. R. Lakshmanan:** Shanthi Feeds Pvt. Ltd.
23. **Mr. Jaison John:** U. S. Soybean Export Council, Inc.
24. **Mr. Rakesh Swami:** Godrej Industries Limited

Dr. Devender Hooda invited Dr. Mahesh P.S., Joint Commissioner and Director of the Centre of Excellence for Animal Husbandry (CEAH), Bengaluru, to the stage. In his presentation, Dr. Mahesh spoke about CEAH, which is based at Hessarghatta in Bengaluru, and encouraged delegates at the CLFMA Symposium to take advantage of their facilities. The institution is spread over 642 acres across four campuses and offers a wide range of programs.



Dr. P. S. Mahesh stated, "Over 5,000 veterinarians are graduating, and they need to become smart veterinarians. Out of these, 3,000 are entering the government sector. However, there is no connect among veterinarians, the industry, and the government. Therefore, there should be an organization to bridge this gap and showcase the potential of the veterinary business." He added, "There is a need to understand the business side of veterinary practice, which is taught over four years in animal husbandry."

Dr. P. S. Mahesh further informed that CEAH boasts state-of-the-art Poultry Automation units, modern dairy sheds, an Embryo Transfer (ET) lab, a Sex-Sorted Semen lab, an International Animal Quarantine facility, and the largest fodder seed production unit in the country, all equipped with the latest technology for irrigation.

Session - 3

The final session was titled – **“Securing Sustainable Livestock: Challenges and Opportunities.”**

Moderator: Mr. G. Chandrashekhar, Economist, Senior Editor and Policy Commentator

Speakers/ Panelists:

Dr. Jiwan Kumar Gupta, Veterinary Officer, Department of Animal Husbandry, Government of Punjab

Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited

Mr. Kevin Roepke, Regional Director, U.S. Soybean Export Council

Mr. Neeraj Kumar Srivastava, Past Chairman, CLFMA OF INDIA



Session Highlights:

The session commenced with Dr. Devender Hooda inviting the moderator, Mr. G. Chandrashekhar, an economist, senior editor, and policy commentator, along with the panelists: Dr. Jiwan Kumar Gupta, Veterinary Officer in the Department of Animal Husbandry, Government of Punjab; Dr. Vibha Ahuja, Chief General Manager of Biotech Consortium India Limited; Mr. Kevin Roepke, Regional Director of the U.S. Soybean Export Council; and Mr. Neeraj Kumar Srivastava, Past Chairman of CLFMA of India, on the stage.

The session commenced with the panelists sharing their views and expertise on the topic "Securing Sustainable Livestock: Challenges and Opportunities," providing attendees with valuable information.

The moderator, G. Chandrashekhar, Economist, Senior Editor and Policy Commentator began the session by explaining sustainability and its multiple dimensions, emphasizing its multi-disciplinary and multi-generational aspects. Mr. G. Chandrashekhar, who has formulated a sustainability assessment, refers to it as Chandrashekhar's Seven-Way Sustainability Test.

Mr. G. Chandrashekhar, explains, "I refer to it as the STEEPLE test: S stands for Social, T stands for Technology, E stands for Economic, E stands for Environmental, P stands for Political, L stands for Legal, and E stands for Ethical."

Mr. G. Chandrashekhar, adds, "Therefore, you need to apply this seven-way sustainability test to any business or policy. Is what I am doing socially relevant? Can technology play a better role in capturing value? Is it economically feasible? Is it environmentally friendly?"

Is it politically acceptable? Is it legally sound? And finally, is it ethically, right? whatever I am doing, my business? If the answer is yes to each of these questions, there is a reasonable probability that the business, investment, or government policy in question will be sustainable."

Mr. G. Chandrashekhar, points out that globally, meat consumption is clearly shifting towards poultry. By 2030, OECD projections indicate that poultry meat will represent over 40% of all protein from meat sources.

Dr. Jiwan Kumar Gupta, Veterinary Officer, Department of Animal Husbandry, Government of Punjab

Dr. Jiwan Kumar Gupta, Veterinary Officer in the Department of Animal Husbandry, Government of Punjab, believes it is his duty as a veterinarian to make treatment economically viable for farmers. He states, "We must work together to ensure that farmers are guided in the proper manner." He outlines a list of areas that should be addressed.

Pointers:

1. "Out of the 20 crore cows, only 7.5 to 8 crore are used for milking. And if we look into the calves, they are around 7.5 crore. This is very important."
2. "Embryo transfer technology, imported semen, sex semen, we are producing only 40,000 female calves per year. Compared to the local semen, we are producing around 1.25 to 1.5 crore total calves."
3. "If we, if we will not, we are not able to improve our genetics, we will not bring sustainability."
4. "There is a need to visualise the economic impact."
5. "We have to reduce both dry matter as well as body weight. We have to produce compact animals, we have to reduce dry matter intake."
6. "There is a need to looking in to emerging viral diseases, the major cause is immunosuppression, vaccination failure."
7. "We have to move from ingredient to nutrient feed."
8. "If we want to bring sustainability, electrical conductivity of the water must be monitored that way forward. This is very important yet most neglected."
9. "Loss of productivity, retention of placenta, many other diseases are caused to heat stress. This needs to be managed."
10. "The heat stress can cause up to 1,000 to 2, 000 litre loss of milk yield. We have to address it."
11. "Mastitis in almost 90% cases are metabolic and we are irrationally using antibiotics. These are antibiotics that are to be used in ICU, we are using in OPD."
12. "Antimicrobial resistance - is the biggest responsibility lies on the pharma company."
13. "Tie-ups with multinational companies, providing quality supplements, feed supplements, organizing cattle fairs - should be held."
14. "Genomics must be planned state-wise, area-wise, breed-wise and data recording."
15. "Everything can be taught to the farmer through social media, Facebook, YouTube."

16. "The farmer must get the blood sample tested before getting treatment done."

Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited

Dr. Vibha Ahuja, Chief General Manager of Biotech Consortium India Limited, focused on several key points regarding GM crops. She explained that there are more than 20 GM crops adopted worldwide, covering over 200 million hectares in 27 countries, and these crops are consumed in many more countries, even where they are not grown.

Dr. Vibha Ahuja, Chief General Manager, Biotech Consortium India Limited adds, "The major crops under which this technology is utilized include corn, soybean, canola, and cotton. Out of these, three are highly relevant to the livestock industry."

Pointers:

1. "We have in India only one GM crop which is BT cotton, approved in 2002."
2. "All the countries which adopted GM crops were developed to deal with major problems."
3. "GM crops has added to the economical values, it helped tripled, and it helped increase their production, maintain quality etc. "
4. "We do not have any further approval since almost 2002 for GM crops."
5. "GM mustard, which was developed by the University of Delhi, has used our own technology, not a multinational technology, was approved by the government, but there is a supreme Court case on it."
6. "As the numbers of trials have reduced, the research activities have reduced significantly, leading to the stagnation in the production and increase in prices."
7. "India is almost at the bottom of the line. The productivities are extremely low compared to the global averages in all the feedstocks."
8. "There is a new technology on the horizon which is gene editing - a CRISPR-Cas technology which is one of the most powerful technology of the century."
9. "The difference between GM crops and gene editing is that we do not insert foreign genes here. The final products are free from transgenes. So, they are not regulated as GM crops if there are no foreign genes."
10. "In March 2022, the Ministry of Environment has exempted such plants from GM regulations. So, we have a lot of extensive research underway in India as well as globally."
11. "The awareness among these stakeholders is essential, especially the user community, will be the key to taking benefits of this new technology."

Mr. Kevin Roepke, Regional Director, U.S. Soybean Export Council

Having worked in various markets around the world, Mr. Kevin Roepke believes that India has numerous opportunities, as well as some challenges. "India needs to be positioned as a global leader in feed production. India is currently the world's fourth-largest compound feed producer, having overtaken Mexico, and perhaps, in our lifetimes, it will soon surpass Brazil."

With an industry of this scale, there is a need to assess the challenges related to sustainable growth. He elaborates on these points in his presentation.

Pointers:

1. "Two significant challenges on the horizon are raw material and talent and labour."
2. "There needs to be work done on the soy and soybean meal."
3. "India's soybean production is stagnant over the last 20 years."
4. As the area expands into more marginal lands, its yield is low, resulting in a stagnation of soybean production.
5. "India should be exporting and importing soybean meal simultaneously depending upon where it's produced, where it's consumed in order to stay globally relevant."
6. "We need to look at Ecuador as a prime example of becoming and continuing to be globally competitive. Ecuador has an invigorated in the shrimp sector that is continuing to grow in the global scene. The reason for this is they've exempted all soybean meal from tariffs."
7. India's not only amongst the lowest in soybean yields, it's actually the second lowest in soybean yields. And as a feed manufacturer that is a concern."
8. Middle Income Trap: After the industry takes all of the economic gains from resources from their cheap labour source, they struggle in getting to that next plateau of GDP growth. However, thankfully Prime Minister Narendra Modi has taken an initiative in the Skills India Program."
9. "The U.S. Soybean Export Council is proud to have the Soy Excellence Center launched five years ago globally. Through 2024, they've educated over 28,000, now 29,000 participants globally."

Mr. Neeraj Kumar Srivastava, Past Chairman, CLFMA of India

Mr. Neeraj Kumar Srivastava, Past Chairman of CLFMA OF INDIA, highlighted several ways to enhance the profitability of the livestock industry by leveraging available opportunities.

Pointers:

1. "Will the usage of DDGS have future health issues in people?"
2. "The maize availability, the feed and fodder availability for livestock, needs to be addressed."
3. "Last year the maize price was Rs 20 and now its Rs 30 per kilo."
4. "Last year due to avian influenza 22,000 crore rupees was washed away from the poultry industry."
5. "There needs to be a solution to the FMD (Foot and Mouth Disease) in cows. by 2030 we need at least one state FMD free."
6. "We have to work towards the social and environmental challenges."
7. "Emission of Methane from cows is equivalent to one car, nitrogen emission and ammonia from the poultry and Phosphates from the aqua - are some of the environmental hurdles we need to look into."
8. "Feeding 140 crore people in the country is the second biggest opportunity and using new technology can help the sector."

9. "We have 200 million hectare land which is not being used for agriculture. We can really utilize this 200 million acre of land for growing some fodder or some grains in the country."

For more information, please refer our website www.clfma.org

Valedictory Session:



Symposium Summation and Conclusion:-

The symposium concluded with a valedictory session delivered by Capt. (Dr.) A.Y. Rajendra, CEO of Godrej Agrovet Ltd, who provided a summary of the discussions and key takeaways from the event. He expressed gratitude to the distinguished dignitaries and government officials who honored the conference with their presence over the past two days.

Take -Aways

Day 1 – Inaugural Session

Mr. Balram Singh Yadav, Managing Director of Godrej Agrovet Ltd., addressed various topics, including productivity, data, the growth rate of the industry, structural changes, and future challenges.

Shri. Tarun Sridhar, IAS, Retd. deliberated on environmental challenges such as methane emission and obstacles in the industry.

Shri. Rajiv Ranjan Singh, Hon'ble Minister of Fisheries, Animal Husbandry, and Dairy, Government of India shared his insights on government support and its vision for the dairy and fisheries sectors.

Day 2 - 65th National Symposium 2024

Key themes that emerged from various interactions throughout the day included:

- **Alternative feedstocks for sustainable animal nutrition**, especially in light of the significant volatility in key raw materials such as grains and oils.
- The most critical imperative for the industry is to be prepared for **more alternatives, not only to manage costs but also to meet the demand for feed.**

Day 2 - Session 1

Mr. Reece H. Cannady touched upon how the U.S. has benefited from the usage of sorghum as an alternatives to corn, suggesting that India could also explore this option.

Mr. Ajay Jhunjunwala provided an overview of various raw materials, including grapeseed meal and oil brands, while sharing insights into the outlook for extracted raw materials in upcoming sessions.

Dr. Prashant Shinde elaborated on how the new entrant, DDGS, is transforming the entire protein landscape.

Ms. Anupa Velusamy focused on the potential of alternative feedstocks, including insect meal. As a sustainable protein source for livestock, insect meal sparked lively discussions about further exploration and investment in this area.

Day 2 - Session 2

The session on technological advancements and agritech innovations provided insights into successful business use cases demonstrating how technology can be effectively utilized in agriculture. Whether through AI or efficient farming practices, these innovations address some of agriculture's most enduring challenges. **Mr. Narendra K. Pasupathy and Mr. Nikhil Chitale** shared unique perspectives on integrating cutting-edge solutions into everyday farming practices.

The dialogues around transforming technology-driven supply chains were supported by a noble intent to operate more efficiently, focusing on the analysis and automation of scalable business models. There were passionate viewpoints highlighting the importance of delivering quality products to customers, with a special mention of the vulnerabilities associated with aqua products.

Day 2 - Session 3

Dr. Jiwan Gupta emphasized that "economics is everything," highlighting the critical need for increased yield from compact animals, particularly cattle. He also stressed the importance of addressing disease challenges within the livestock sector.

Dr. Vibha Ahuja discussed the significance of GM crops and the necessity of initiating work in this area.

Mr. Kevin Roepke addressed India's bottlenecks in production, talent, and labour, which are highly relevant to today's context.

Following Mr. Kevin Roepke's insightful remarks, **Mr. Nissar F. Mohammed, Treasurer of CLFMA OF INDIA**, delivered the **Vote of Thanks**.

Apart from the context-based panel discussions, several recurring themes emerged, including the impact of climate change on agricultural outputs and farmer income, which underscore the urgent need for sustainable practices and the adoption of climate-smart methods in agriculture.

The two-day Symposium concluded with a call for greater collaboration among government bodies, stakeholders, and regulatory agencies. Participants engaged in lively discussions, exchanging ideas and addressing questions from the audience.

The 65th National Symposium, 2024 emphasized the importance of creating a conducive environment for the growth of the livestock industry. Attendees included industry professionals, government officials, researchers, scientists, and stakeholders, all actively participating in the comprehensive program.

To foster further connections and networking, a dinner was held at the end of the event. The symposium received an overwhelming response, highlighting the industry's growing interest in and need for such platforms. The program was well appreciated by all participants.

