

National Milk Day News

IDA HQ Celebrates National Milk Day 2023

National Milk Day 2023 was celebrated in Indian Dairy Association (IDA) Headquarters in hybrid mode. Program started at 10.30 am with Guest of Honour and Chairman, IDA (NZ) Shri S.S. Mann lighted the ceremonial lamp on the occasion. Homages were paid to Dr. Kurien by all attended the event.

Dr. Bimlesh Mann, CEC Member-IDA and Assistant Director General (EP&HS), Agricultural Education Division, ICAR, New Delhi was the Special Guest. Dr. Jagdeep Saxena, Editor, Dugdh Sarita and Dr Mohan Shrigiriwar, Chairman, Vasant Foundation, were the Special Invitees on the occasion.

While addressing the participants on National Milk Day, **Shri S.S. Mann** said that during his study days in NDRI, he used to discuss about the shortage of milk in the country. Operation Flood was launched in 1970 by Dr. Kurien and today we have become the highest milk producer in the world.

Dr. Kurien had his dream. He worked for his dream. He achieved his dream and we are enjoying that fruit today. The real tribute to him will be to keep his legacy alive and hand over it to the next generation. We should continue to work on the principle set by him.



Dr. R.S. Sodhi, President-IDA joined the National Milk Day event online. While addressing the participants online, Dr. Sodhi said that after independence other than Mahatma Gandhi, if anybody has done in a big way for the masses, it is Dr. Verghese Kurien. Due to Dr. Kurien's effort, 80 million Indian dairy farmers are having their permanent source of livelihood from the dairy sector. We all should continue to contribute our part towards sustainable growth of dairy sector in the country by working on the path shown by Dr. Kurien.

Speaking on the occasion, **Dr. Bimlesh Mann** said that the growth in milk production is more than 5% in the country. But we have to sustain this growth. In this regard, we need to popularize the milk in our society by



explaining its benefits. In the market, there are many beverages claiming that it has more nutritional value than that of milk. So, it is our duty to share correct information with all and not to get misguided by the claims made by the manufacturers of such beverages.

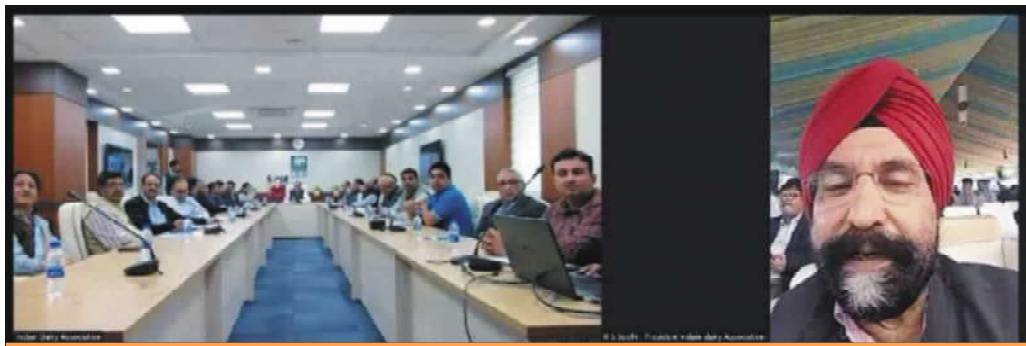
Referring to the unique property of milk, Dr. Mann pointed out that in a recent conference of '*American Society for Nutrition*', researchers have recommended, based on their study, that there is a need to ensure that consumers are aware about many plant-based dairy alternative products in the marketplace that are not nutritionally equivalent to cow's milk. Researchers study also claimed that compared to cow's milk, only 12% of the dairy alternative products contained comparable or greater amounts of all three nutrients (calcium, vitamin D, and protein).

There are many research references published in the high impact journals on the cow milk. The researchers have published their findings based on the clinical trials in various countries. Research paper says that milk has the benefit on the cardiovascular disease, type-2 diabetes, osteopetrosis, colorectal cancer and alzheimer diseases.

Dr. Mann also shared an interesting find out of a published paper that says that if an elderly person (over 60 years old) drinks 3 cups of milk a day, his/her brain will remain young.

She also suggested that IDA should bring out a Monograph on the nutritional quality of milk and it should be circulated as much as possible so as to make the people aware more about it.

Dr. Jagdeep Saxena, Editor, Dugdh Sarita began his address by congratulating crores of milk producers and even the consumers on 102th birth anniversary of Dr. V. Kurien. Dr. Saxena informed the gathering that it is a proud moment for the Indian Dairy Association (IDA) as National Milk Day celebration was initially proposed by IDA only. Later on, with the help of National Dairy Development Board and followed by the overwhelming support from cooperatives, we started celebrating it as national festival. Slowly and steadily this celebration was spread all over the country. Nowadays, even the Central government is also celebrating National Milk Day in a big way. Many awards are distributed by the government on this occasion related to the dairy sector.



The main objective of celebrating the National Milk Day was to educate the society about the nutritional value of milk. However, nowadays the necessity of such event is more relevant as dairy alternatives are wrongly focussed in the society as more nutritive than milk. We need to clarify this to the consumer, especially the new generations before they get misguided. He suggested that we may start publishing the nutritional value of milk in every issue of our publications.

Dr. Saxena also apprised the participants about how the dream of Dr. V. Kurien started taking shape when he agreed to work for the milk producers of Anand on the request from Shri Tribhuvandas Patel Ji. Later on, Dr. Kurien started working selflessly on his dream for the sustainability of the dairy sector. In this regard, he established many institutions such as NDDDB, GCMF, IRMA, etc. These institutions are the pillars of the dairy sector, even today.

Other participants also lauded the contribution made by Dr. Kurien for the society.

Shri Hariom Gulati, Secretary General, IDA updated the members about the recent activities of IDA and future programs through slide presentation.

National Milk Day and Commemoration of 75th Years of Establishment of IDA at BHU

Indian Dairy Association (Eastern UP Local Chapter) and Department of Dairy Science and Food Technology, Institute of Agricultural Sciences, Banaras Hindu University (BHU), jointly organized a National Conference on "**Intensive Integrated Dairy Development in a Globalized Scenario**" at the Shatabadi Krishi Bhawan, BHU from November 26-30, 2023.

This was a remarkable endeavor to globalize the dairy sector, celebrate Amrit Varsh, 75th year of foundation of Indian Dairy Association (IDA) and honour Dr. Verghese Kurien – the Milkman of India, on his 102nd birth anniversary.

The IDA is an apex body of dairy fraternity in India knitting together the dairy professionals, researchers/educators industrialists, and farmers. The event focused on the theme, delving into challenges and opportunities within the dairy sector, specifically in Eastern Uttar Pradesh.

Dr. Punjab Singh, Chancellor of Rani Lakshmi Bai Central Agricultural University presided over the conference. Distinguished speakers included Dr. R.S. Sodhi, President-IDA; Dr. V.K. Shukla, Rector, BHU; Dr. I.K. Narang, Secretary, IDA (NZ) and Prof. S.V.S. Raju, Director Institute of Agriculture Sciences. The program commenced with traditional lighting of lamp jointly by the dignitaries. The guests were extended a warm welcome by Prof. Anil Kumar Chauhan, Head of the Department of Dairy Science and Food Technology.

Dr. R.S. Sodhi, in his virtual address underscored the challenges faced by Eastern Uttar Pradesh in the dairy sector. **Dr. Punjab Singh** highlighted the need for sustainable development and proper waste management in the dairy industry.

The conference proceeded with two Technical Sessions featuring prominent speakers. Session one was addressed by Mr. R.S. Saigal, MD, Mother Dairy, Varanasi; Dr. I.K. Narang and Mr. Keshav Jalan- a passionate cow lover and Chairman of several social organisations in Varanasi. Second Session was addressed by Dr. G.S. Rajorhia, former President-IDA and Dr. Raja Rathinam a distinguished dairyman presently working with UNDP projects. All the speakers contributed their unique perspective, shedding light on distinct facets of the dairy sector and enriching discussions on the theme of the conference.

Mr. Saigal emphasized the critical role of entrepreneurship in the dairy sector and how it can serve as a catalyst for economic development in the region.

Dr. Narang delivered a captivating presentation on Nutritive and prophylactic properties of milk and milk products from an Ayurveda perspective and delved into the insightful connection between Ayurveda and modern dairy science.

Mr. Keshav Jalan's presentation brought a unique perspective to the conference, focusing on "**Dairy Development and Entrepreneurship**." He shared his entrepreneurial journey and motivated students to



consider the dairy sector as a viable vocational option. Mr. Jalan's insights extended beyond routine discussions, providing a practical guide on how aspiring entrepreneurs can navigate challenges and achieve success in the dynamic dairy industry.

His contribution went beyond words, as he donated a machine for converting cow dung to fire sticks to the Dairy farm at the Department of Dairy Science and Food Technology, demonstrating a commitment to sustainable practices.

In the second technical session, **Dr. G.S. Rajorhia** in his off-the-cuff address presented a future roadmap for dairy development in eastern UP. His emphasis was on viewing dairy as a source of employment generation.

These diverse presentations not only enriched the technical sessions but also provided audience with a comprehensive view of the challenges and opportunities in the dairy sector. The speakers' distinct perspectives contributed to an all-inclusive understanding of the intricacies involved in integrating dairy development into the broader context of a globalized scenario.

In order to foster talent among students, many competitions were proactively organized throughout the celebration period *i.e.* November 26-30, encouraging students to apply theoretical knowledge to real-world challenges in the dairy sector. The programs included a quiz competition, Ideathon and e- poster presentation, nurturing engagement and knowledge sharing among participants. Many students from different departments showed their active and enthusiastic participation in the different competition and the winners of each event were felicitated in the conference.

Rural Dairy Conference

Earlier, on 29th November, as a part of the programme, the IDA (Eastern UP Local Chapter) organized a



roadshow in the remote villages of Jaunpur spreading the vision of Dr. Verghese Kurien under the cohesive coordination of Dr. Raja Rathnam. A rural conference was also organized at the community hall, Barsati Block, Jaunpur which aimed to familiarize the villagers with the current trends in the dairy industry.

While welcoming the delegates and guests, Dr. Raja Rathnam, the Program Coordinator, IDA-Eastern UP Local Chapter informed the importance of the Conference to implement the Vision of Dr. Verghese Kurien. In the inaugural speech, Shri Rakesh Mishra, Block Development Officer, representing the Government of UP emphasized that IDA along with agencies should make joint efforts with Gram Pradhan so that permanent dairy development is achieved on a long term basis with commitments by all the stakeholders in these areas where unorganized sector is dominating. The Chief Guest of the Rural Conference, Shri Birendar Rai, Chairman, Milk Cooperative Society Muroil (a Society under Bihar State Cooperative Milk Producer Federation) informed that Bihar was having such problem of dominance of unorganized sector in earlier times. He stated that with the help of NDDDB and other Organizations including local village Pradhan, the dairy farmers are getting better benefits in Bihar in the present times which is lacking in Eastern Uttar Pradesh.

He also said that Government should give uniform milk price subsidy to all dairy farmers in the organized sector so that the dairy farmers can join in the movement of converting the unorganized sector into organized sector which is beneficial to all – consumers, producers and other stakeholders.

Many experts including Dr. Ram Singh Patel from the Department of Animal Husbandry, Govt. of Uttar Pradesh; Dr. Vikash Patel, Emergency Cattle Care, Govt. of India Project; Dr. Suresh Subramanian, Former Professor, Tamil Nadu Veterinary University; Dr. D.N. Dubey, BAI; Shri Abishek Mouriya and other dignitaries also gave their opinions to achieve the theme of the Conference.

The success of the event is attributed to the exceptional contributions and collaborative spirit of the Chairman,

INDIAN DAIRYMAN

IDA Eastern UP Local Chapter and Convener, Dr. Arvind; Co-Convener, Dr. Tarun Verma; Organizing Secretaries- Dr. Vinod Kumar Paswan and Dr. Durga Shankar Bunkar, Joint Organizing Secretary, Dr. Ankita Hooda; and Advisory Committee members- Prof. Anil Kumar Chauhan; Prof. Dinesh Chandra Rai; Prof. Raj Kumar Duary; Dr. Abhishek Dutt Tripathi; Dr. Amrita Poonia; Dr. Chhaya Goyal; and Mr. Sunil Meena.

The collective efforts and expertise of these individuals ensured a fruitful and enlightening conference, contributing to the broader goal of enhancing dairy development in the eastern region of Uttar Pradesh under the evolving globalized scenario.

Seminar on “Role of Milk and Milk Products for Better Human Health” Organized by IDA Punjab State Chapter

On the occasion of National Milk Day, IDA Punjab State Chapter held a seminar on "**Role of Milk & Milk Products for Better Human Health**" on November 25, 2023 at NITTR Chandigarh. This seminar was in continuation of awareness drive undertaken by IDA in the current year which is 75th year of its establishment.

Cordial invitation were sent to the industry professionals (Sales & Marketing, Quality & Procurement departments) professors and students from Guru Angad Dev Veterinary University (GADVASU) and members of IDA to join this event. The event was chaired by Shri S.S. Mann, Chairman IDA (NZ).

Dr. Inderjit Singh, Chairman, IDA-NZ Punjab Chapter welcomed the dignitaries and empathized on the importance of milk and milk products in our daily diet. He introduced the dignitaries and speakers to the audience.

Dr. G.S. Rajorhia, former President-IDA delivered his opening remark to start the event. On the occasion of 75th year of its establishment he enlightened the participants about establishment of IDA, its growth and role in development of dairy in India. Dr. Rajorhia was honored by IDA Punjab State Chapter for his remarkable



contribution to the dairy industry with lifetime achievement award.

Delivering his Keynote address, the Guest of Honor **Dr. Kamal Kumar Garg**, IAS, Managing Director, Milkfed Punjab remembered Dr. Verghese Kurien on his birth anniversary and the unmatched role he played in development of milk production in India.

Shri S.S. Mann, Chairman, IDA(NZ) emphasized on providing better price to the farmer, quality improvement and innovation in product development for better acceptability of milk and milk products.



During the technical session following speakers delivered their talk on various topics related to role of milk and milk products for better health:

- Composition of MILK and its health benefits by Dr. Nikita Goel Assistant Professor, GADVASU, Ludhiana.
- Every white fluid is not Milk by Dr. P.K. Singh, Associate Professor, GADVASU, Ludhiana.
- Role of Cheese in Human Health by Dr. Yogesh Khetra, Sr. Scientist, NDRI, Karnal.
- Fortification of Milk and its Importance to Human

Health by Dr. Sumit Arora Principal Scientist NDRI, Karnal.

- Milk as Complete Food by Dr. Sonia Gandhi Nutritionist Fortis Hospital, Mohali.
- Milk and Milk Products - Nutritive and Medicinal Properties by Dr. I.K. Narang Secretary, IDA (NZ).

To sum up the event Mr. Narinder Singh Bahga, Secretary, IDA-NZ Punjab Chapter thanked all the dignitaries, speakers and other participants for attending the event and making it a grand success.

IDA Haryana State Chapter Organized an Awareness Programme for Students of Karnal Village

Dairying is a vital part of the global food system and it plays a key role in the sustainability of rural areas in particular. India's dairy industry has played a crucial

role in the country's economic development. This sector has also demonstrated an important part in achieving food security, reducing poverty, generating employment



opportunities, and providing a regular source of income for rural households. Together, the nutrients in milk and dairy help to (i) Keep muscles, bones, nerves, teeth, skin and vision healthy, (ii) Release energy from foods and reduce tiredness and fatigue, (iii) Maintain healthy blood pressure, (iv) Support normal growth and brain development, and (v) even support normal immune functioning.

On the occasion of National Milk Day 2023, IDA

Haryana State Chapter (HSC) organized an awareness programme for students of Karnal Village showcasing the importance of milk in human life and its benefits. In this program about 300 persons including 250 students participated with inordinate interest.

Dr. S.K. Kanawjia, Ex-Emeritus Scientist (Dairy Technology) & Chairman, IDA HSC welcomed the Chief Guest, Dr. G.S. Rajorhia, former President-IDA; experts; Principal and Teachers of Govt. High School, Karnal; and students at this occasion and apprised the gathering with the objective of National Milk Day, elaborated the importance of milk and dairy products in meeting the daily nutritional and health requirements.

Dairy plays a significant part in numerous aspects of Indian society, including cuisine, religion, culture, and the economy. India has the largest dairy herd with over 300 million bovines, producing over 221 million tonnes of milk. India ranks first in milk production in the world.

In 2014, dairy majors of the country along with the IIDA decided to celebrate National Milk Day in India on November 26 to pay tribute to Dr. Verghese Kurien on his birthday anniversary, who is fondly known as the Father of White Revolution. Dr. Kurien was also called the Milkman of India as his ideas and efforts to build a system of farmer cooperatives helped transform the country from an importer of dairy products to the world's largest milk producer.

Dr. Kanawjia, Former, Emeritus Scientist and Chairman, IDA HSC enlightened the gathering about the achievements and contributions made by Dr. Verghese Kurien. Dr. Kurien was a social entrepreneur whose "billion-litre idea", Operation Flood, made dairy farming India's largest self-sustaining industry and the largest rural employment sector providing a third of all rural income. He also played a key role in the establishment and success of Amul Brand. Because of his efforts only, India became the largest producer of milk in 1998, surpassing the US. He also helped India become self-sufficient in edible oils.

Dr. G.S. Rajorhia, Former, President-IDA enlightened the gathering with the role of milk and milk products for maintaining good health. Milk has been known as nature's most complete food for millennia, playing currently an important role in the diet of over 6 billion people in the world. Milk contains a wide array of nutrients, including vitamins, minerals, protein, healthy fats and antioxidants. Always keep in mind that its nutritional content can vary depending on many factors.

Milk is a rich source of quality protein that contains all nine essential amino acids. It may help reduce age-related muscle loss and promote muscle repair after exercise. Milk contains a variety of nutrients that benefit bone health, such as calcium, vitamin D, phosphorus

and magnesium.

Studies suggest that consuming milk and dairy products may prevent osteoporosis and reduce the risk of fractures. Adding milk, especially whole milk, to your diet may prevent weight gain.

Several studies have linked milk intake to a lower risk of obesity. Furthermore, the conjugated linoleic acid in milk has been studied for its ability to boost weight loss by promoting fat breakdown and inhibiting fat production. Additionally, it's an excellent source of hundreds of different fatty acids, including conjugated linoleic acid (CLA) and omega-3s. Conjugated linoleic acid and omega-3 fatty acids are linked to many health benefits, including a reduced risk of diabetes and heart disease. Additionally, many studies have associated diets rich in calcium with a lower risk of obesity. Milk is a nutritious beverage that provides a number of health benefits.

Moreover, it's a versatile ingredient that can be easily added to your diet. Aside from drinking milk, try these ideas for incorporating it into your daily routine such as smoothies, oatmeal, coffee, soups, etc.

Dairy foods have a specific role to play in dental health as they contain a unique combination of special anti-decay nutrients such as calcium, phosphorus and the protein. Some fermented foods contain probiotics; active bacterial cultures with unique characteristics that allow them to survive in the gastrointestinal tract. When consumed in adequate amounts, they provide a health benefit and have the potential to maintain the natural balance of the gut microbiota. A healthy lifestyle and diet can help reduce your risk of heart disease, and studies show that people who regularly consume milk, cheese and yoghurt are more likely to have a reduced risk of heart disease than those who don't. Additionally, multiple studies indicate that three daily serves of milk, yoghurt and cheese is linked to a reduced risk of hypertension. The Australian Dietary Guidelines state that foods from the dairy food group are linked to a reduced risk of colorectal cancer. Dairy products in general, particularly those that are low-fat, are protective against developing type 2 diabetes. Dr. Rajorhia very emphatically explained the role of milk constituents and milk products in keeping good health in life.

Dr. Mahender Singh, Emeritus Scientist and Vice Chairman, IDA HSC elucidated the audience with the nutritional qualities and health attributes of different species of milk. He further elaborated the need of students to visit certain dairy institutes/colleges to acquire the practical knowledge of various operations being carried out for production and processing of milk.

Mr. Upneet Rajorhia, Member-State Executive Committee, HSC introduce the theme of National Milk Day celebrations and delivered vote of thanks. Smt. Reena

Kumar, Principal, Govt. High School, Village Karnal thanked all the participants and presented the activities of the school. She also summed up the talks of the dignitaries.

Members of State Executive Committee of Haryana State Chapter Dr. Pradip Behare and Dr. Yogesh Khetra and special invitee Dr. Avneet Rajorhia contributed significantly in organizing this programme. Finally, Flavoured milk and sweets were distributed to all students and other participants.

Chairman, IDA HSC Dr. Kanawjia thankfully acknowledged Shri Sukhbir Singh Mann, Chairman, IDA (North Zone), for his valuable guidance, blessings, and also provided funds to organize this program of national importance.

National Milk Day Celebrated by IDA (SZ)

IDA (SZ) in association with the Alumni Association, SRS-NDRI, and SRS of ICAR-NDRI, Bengaluru celebrated National Milk Day on November 26, 2023 by organizing a Webinar online. Dr. Cyril Das, Novatech Solutions, Australia delivered a lecture on **“Intricacies of Dairy Plant Engineering and Homogenizers”**. Dr. Das enthralled the audience with his insights and experiences about dairy engineering and its applications in the dairy industry. Dr. Bandla Srinivas, President, Alumni Association, SRS, NDRI welcomed the gathering and paid rich tributes to Dr. Verghese Kurien- Milk Man of India and narrated his association with SRS, NDRI. Dr. Arindam Dhali, Head, SRS of ICAR-NDRI, in his remarks, recalled the contribution of Dr. Kurien and also the contribution of our farming community in leading our country as the largest milk producer.

Dr. Satish Kulkarni, Chairman, IDA (SZ) and Dr. Rajendra Kumar, Vice-Chairman, IDA (SZ), appreciated the presentation of Dr. Das and expressed that this session would greatly benefit all the stakeholders of dairying,

especially the students. Dr. D.N. Das, Vice President, Alumni Association introduced the guest speaker of the session to the audience. Dr. Mukund A Katakaltware, Secretary, Alumni Association proposed a vote of thanks and Dr. S. Subash, Secretary, IDA (SZ) coordinated the online program. The programme was conducted by Dr. Monika Sharma, Treasurer, Alumni Association.

National Milk Day Celebrations ‘Paalvaaram ‘23’

IDA Kerala Sate Chapter in association with Jaitra Student's Union 23-24 of Verghese Kurien Institute of Dairy and Food Technology (VKIDFT), Kerala Veterinary and Animal Sciences University (KVASU) have conducted a one week program as part of National Milk Day celebrations under the banner Paalvaaram ‘23, to commemorate the birth anniversary of Dr. Verghese Kurien – the Milkman of India. Various competitions were conducted as a part of Paalvaaram'23 which includes online poster making competition, photography competition, treasure hunt and extempore competitions were conducted for students.

24-11-2023 Awareness Skit at VKIDFT

A flash mob was performed by the students, followed by an awareness skit. The whole program was to address various milk myths prevailing in the society and to introduce newly developed technologies and products in the dairy sector. An advertisement competition was conducted for B.Tech. Dairy Technology and Food Technology students at VKIDFT seminar. The prizes were sponsored by ERCMPU.

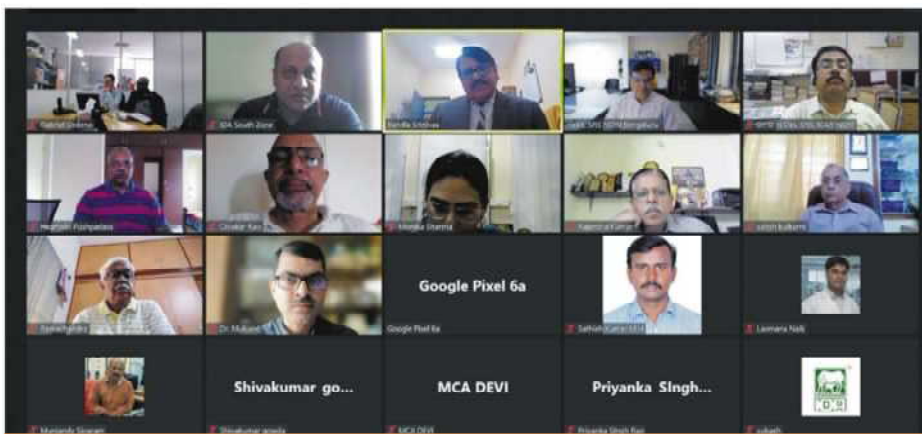
25-11-2023 The treasure Hunt completion was conducted for the staff and students of VKIDFT.

26-11-2023 A video presentation regarding the objectives of National Milk Day celebrations, Dr. Verghese Kurien and his valuable contributions was created and released by the students of VKIDFT on official VKIDFT Instagram page and other social media.

27-11-2023 Awareness Program for farmers

An awareness skit at nava kerala sadass, paanjal grameena vayanashala was conducted. A gathering of 130 farmers were assembled for the function.

28-11-2023 Awareness program and quiz for school children



Students of VKIDFT conducted an awareness section at St. Vincents Palloti Central School, Kalathode, Thrissur. The program was commenced with a flash mob followed by an awareness skit and awareness talks about various myths and newer technologies in the dairy sector. An adulteration detection demonstration class was also given. An interactive quiz section was the main attraction of the program.

29-11-2023 Expert Talks and Felicitation of Best Outgoing Student and Best Women Dairy Farmer, Kerala

The day began at 10.30 am by paying floral tribute to the statue of the Great personality Dr. Verghese Kurien by the invited dignitaries. Expert talks session was conducted at VKIDFT seminar hall. The programme officially commenced with taking the milk day oath by the students led by the Associate Dean, Dr.

A.K. Beena. The gathering was welcomed by Nazrin Nazer, Vice President Jaitra Student's union 23-24 and the presidential address was given by Dr. S.N. Rajakumar, Dean VKIDFT. Shri T. Nandakumar, former NDDDB Chairman rendered the Keynote address. The milk day message was given by Hon'ble Vice Chancellor, KVASU; Dr. M.R. Saseendranath. Sreelakshmi U of 2018 batch, College of Dairy Technology, Kolahalamedu was given the award for the best outgoing student of the year by Shri T. Nandakumar and the Best Woman Dairy Farmer award was received by Smt. Leema Roslein S, Chittor, Palakkad from Shri C.P. Charles, CEC Member-IDA, New Delhi. Special address was rendered by Shri C.P. Charles and Dr. R. Rajendra Kumar. The felicitations were delivered by Dr. P.I. Geevarghese, former Dean, CDST.

The calender jointly published by AFSTI, Thrissur chapter and IDA Kerala State Chapter was released in the presence of invited dignitaries.

Then, an interactive session with Shri T Nandakumar was followed by the vote of thanks delivered by Dr. Aparna Sudhakaran V, Secretary, IDA Kerala State Chapter.

Valedictory function of Paalvaaram'23 was graced by the Chief Guest Prof. (Dr.) P.I. Geevarghese, Former Dean CDST. The special address was given by Shri M.T. Jayan, Chairman of ERCMPU. The student coordinator was Ms. Navya Suresh Babu, 2nd Year B.Tech. (Dairy Technology) and the staff coordinator was Dr. Aparna Sudhakaran V.



National Milk Day Celebrated by IDA (EZ) at Kolkata

Under the patronage of Shri Sudhir Kumar Singh, Chairman, IDA (East Zone) on November 26, 2023, the National Milk Day was celebrated to commemorate the 102nd birth anniversary of Dr. Verghese Kurien by IDA (East Zone) in the meeting room of National Dairy Development Board, Salt Lake City, Kolkata. Dr. Kurien was born at Calicut in 1921. He was a person with strong determination and will power. Amul was established in 1973 by him. He was committed to the farmers' interest and changed the lives of millions of dairy farmers of India. He was bestowed with Padma Vibhushan. Dr. Kurien was the main architect of India's White Revolution and Operation Flood of 1970s.

Various distinguished persons from different organizations like NDDDB; Directorate of Dairy Development, Govt. of West Bengal; Govt. Polytechnic College, etc., participated in the program. One by one, they highlighted the several constructive activities and



good qualities of Dr. Kurien. Individually, all persons paid their floral tributes to the photo of Dr. V. Kurien with folded hands. Lastly, the program was ended with vote of thanks to the chair.

National Milk Day Celebrated by Bihar State Chapter at Patna



IDA Bihar State Chapter celebrated National Milk Day under the leadership its Chairman Shri Dharmendra Kumar Srivastava on November 26, 2023 as it was the auspicious occasion of the 102nd birth anniversary of the Milkman of India, Dr. Verghese Kurien.

National Milk Day was celebrated in the office of IDA Bihar State Chapter. Members paid homage to Dr. Kurien's visionary venture to make India the highest milk producing country in the world. Dairy Sector has also maintained its status of first position since long. Dr. Kurien continuously inspired all the stakeholders of the dairy industry in the area of infrastructure, milk production, product handling, marketing, and quality management system. The executive committee of the Bihar chapter with the other stakeholders remembered Dr Kurien as the precursor of the industry, pledging to follow the path designed by him.

On this event, Secretary State Executive Committee Shri Ratneshwar Jha and other designated members Shri P.K. Sinha, Shri Avanish Kumar, Dr. Sanjeev Kumar, Dr. Raviranjan, Shri Maheshwar Prasad, Shri Ashok Kumar, Shri Vijay Singh and the professors and students of SGIDT Patna participated in this celebration.

JMF and IDA Jharkhand Local Chapter Jointly Organized National Milk Day

102nd birth anniversary of Dr. Verghese Kurien was celebrated as National Milk Day on November 26, 2023 at the premises of Medha Dairy Plant, Hotwar, Ranchi. Dr. Verghese Kurien is also known as the pioneer of White Revolution, because of which today India is at the leading position in milk production in the world. Dairy

Farmers in India especially associated with cooperative societies have made important contributions in the dairy sector. Due to their tireless efforts the country is now at number one position in milk production in the world.



Medha Dairy is, an enterprise of Government of Jharkhand, being managed by National Dairy Development Board (NDDDB) and the only milk producers' cooperative affiliated to the state and is marketing its milk and milk products across the state. Medha Dairy acts as a link between rural milk producers and urban consumers of the state of Jharkhand. It provides a source of livelihood to state dairy farmers. Milk produced by about 50,000 marginal farmers is supplied daily in the morning and evening through milk collection centres set up in villages. Today, Medha Dairy is processing and marketing around 2.50 lakh litres of milk from 7 processing plants.

The programme was inaugurated by Shri Sudhir Kumar Singh, Managing Director (JMF) cum Chairman, IDA (East Zone) and Shri Pavan Kumar Marwaha, General Manager (JMF) cum Chairman, IDA Jharkhand Local Chapter. Shri Sudhir Kumar Singh shared his work experience with Dr. Verghese Kurien and explained the difficulties faced in making the country number one in milk production in the world.

Shri Pavan Kumar Marwaha apprised the employees about the importance of cooperatives and the incredible contribution of Dr. Verghese Kurien in the success of the White Revolution.

Shri Sudhir Kumar Singh also stated that this time the **National Milk Day has been celebrated at five different places in Eastern Zone - Ranchi, Kolkata, Guwahati, Bhubaneswar and Bihar.** Union Minister of Fisheries, Animal Husbandry and Dairying, Shri Parshottam Rupala ji has inaugurated the event "National Milk Day 2023" and the President of Indian Dairy Association, Dr. R.S. Sodhi was also present as a Guest of Honour at Guwahati.

The event was organized in collaboration with the State Animal Husbandry Department, Assam Livestock Development Board and NDDDB. The prestigious National Gopal Ratna Awards 2023 were also conferred on the occasion.

IDA News

A Seminar on “Safer Dairy Products: Challenges for Industry and Administrators” Organized by IDA HQ

Indian Dairy Association (IDA) organized a Seminar on December 15, 2023 at Hotel Eros, New Delhi.

The event was aimed to bring together industry experts, stakeholders and professionals to engage in discussion, share thoughts and collectively work towards ensuring the safety and quality of dairy products in the country.

Ms. Richie Agrawal, ZEC Member-IDA (WZ) welcomed the Guests and the participants of the Seminar. She also briefly explained the subject of the Seminar.

The eminent Guests of Honour at the inaugural session were Dr. Dheer Singh, Director, NDRI; Dr. R.S. Sodhi, President-IDA; Dr. G.S. Rajorhia, Former President-IDA; Shri Ajay Khosla, Vice President-IDA and Shri S.S. Mann, Chairman, IDA (NZ).

Addressing the august gathering, **Dr. R.S. Sodhi**, President-IDA said that this Seminar was planned on the advice of Department of Animal Husbandry and Dairying. We have been told to respond to the reports in the media that dairy products are not safe. That's why we decided to organized a seminar like this to discuss the issues pertaining to the safety of the milk and milk products.

First of all, we must know that food industry in India is the biggest industry among all others, generating a business of 50 lakh crore. There is no decline in the growth of food industry. Out of the 50 lakh crore food industry, Dairy sector share is around 11 lakh crore. The share of organized food industry is 7 lakh crore that includes 3.5 lakh crore of dairy sector alone. Since dairy sector holds the majority of the organized food business, that's why it has been targeted to gain most by supplying fake and adulterated products in the market by some elements.

Consumer trends are changing nowadays. People are more interested in healthy products. Taste, nutrition and affordability are three parameters applicable in our country and it will remain so in the times to come. After Covid-19, consumers' demand have shifted towards packed food products. Currently, 20-22% dairy products are sold through HoReCa. More growths in dairy business are coming through tier - 2, 3, 4 and small town and villages. There is a saturation in metro cities.

INDIAN DAIRYMAN



That's why local brands are growing and consumers are preferring local brands or locally manufactured products.

Questions have been raised about the quality of the products. As we all are the custodian of dairy value chain, every segment of the dairy sector should ensure that faith and trust of 140 million consumer of the country remain intact.

Among food category, dairy products are consumed more in natural form. Since this category is growing very fast, greed to earn more by some people, are giving negative publicity about the dairy sector.

This will not only impact the nutritional source of 140 million people of the country but also 80 million livelihood source of our dairy farmers. That's why it is our duty to protect the interest of the dairy sector. In this regard, we may look for better technological help such as testing equipment, more laboratory facility. Also, we must seek support from the policy makers so that stricter law and their implementation takes place to control adulteration issues.

Dr. Dheer Singh, Director, NDRI said that as far as safety of dairy products are concern, we have developed technologies for the same and it is our dream that test kits are made available to the doorsteps of each dairy farmers. He further said that Govt. of India is financially supporting institutes like NDRI and through IDA platform, we request the dairy industry that if there is any need to go for research in any new areas, we are ready to help them.

Dr. Singh was of the view that safety measures should be taken at the level of production. Farmers must be educated to use appropriate water and fodder.

Safety issues are regulatory issues. Research organizations do not have much role to play in it. IDA may use its platform to convey the policy makers to enforce strict implementation of the safety regulations.

Shri Ajay Khosla, Vice President, IDA shared his long experience of 50 years in the dairy sector. He said that consumer has the right to ask for the safe product. But the food chain also has the responsibility starting from the procurement centre to the consumer table via chilling centre, dairy plant, retail outlets, etc. Some dairy alternate manufacturers want to enjoy the trust of the milk and milk product by using the word "dairy, milk or ghee". They are using the social media platform to misguide people in the name of adulteration for their advantage. In fact, this was communicated to the FSSAI and some action was also taken for the same.

As far as adulteration is concerned, there may be some isolated cases. But most of them are not the organized players or they do not have latest infrastructure to maintain the quality of their products.

While IDA is celebrating its 75th Year journey under the leadership of Dr. Sodhi, we are conducting various seminars and programs across our zones and chapters to raise the safety issues of dairy products. Whenever adulteration related issue comes up, it hurts the industry. It is the responsibility of all of us connected with the dairy sector. India's milk production is growing @6% for the last 5-6 years. If we continue to grow in the same way, in the next 25 years, we will have more than 100 million tonnes surplus milk available for export purposes. So while we are number one in milk production, we also need to be number one in quality so as to meet export requirement. Now, technological changes have taken place even at the village level, so India can be number one in milk quality too.

Shri S.S. Mann, Chairman, IDA (NZ) said, our biggest challenges are that newer generations are not consuming milk, especially in the educated families. Other important issue is that farmers are not getting adequate prices of their produce. Misbranding is another big issue. Products are named as "pure cow ghee", "A1 or A2 milk/ghee" and many brands are selling their products at a premium price. Similarly, some brands are selling milk mentioning as "Direct from Farm in 24 hours" which is practically not possible. Many brands are selling almond milk, soy milk, etc. They are using the word "milk" to sell their products. These are issues of misbranding, regulatory and administrative. We always find adulteration news during festivals such as Deepawali and Holi which shows that it is a media hype

otherwise such news should come up throughout the year. It is fortunate that IDA is energized now and we are conducting various seminar across the nation through zones and chapters to raise awareness in the society.

Post Inaugural ceremony, Panel 1 discuss took place on "**Nutritional benefits of Dairy Products: Reading between the lines**". The panelists were:- Dr. J.B. Prajapati, Chairman, IDA (WZ); Dr. G.S. Rajorhia, Former President-IDA; Dr. Bimlesh Maan, ADG (EP&HS), ICAR; Shri Biswajit Dutta, QC Head, Mother Dairy; and Ms. Ishi Khosla, Clinical Nutritionist.



Dr. J.B. Prajapati gave his presentation on "**Quality of nutrients from Milk are much superior to plant based products**". In his address Dr. Prajapati said that whatever comes out of udder can only be called Milk. This has been certified by FSSAI. Milk is a complete food and natural lacteal secretion whereas plant-based drinks are manufactured with plant material, water, vegetable oil and many additives.

It is a hype created in the media that many of us are lactose intolerants. Dr. Prajapati claimed that 200 ml of milk will not create lactose related issues with anyone. If (in rare case), somebody has the issue, we have buttermilk, Curd, etc. available for those people. He also said that in order to develop brain, it is necessary to take milk and milk products.

In conclusion, Dr. Prajapati said that as published in the renowned research journals with clinical data of more than 4-5 lakh individuals, there is no alternative to milk. It is the best food that is packed with digestible nutrients, conferring therapeutic effects, all natural, safe and affordable.

Dr. G.S. Rajorhia, Former President-IDA highlighted some of the nutritional facts of milk and milk products in front of the participants. He informed that Cholesterol is finally removed from the dietary guidelines by USFDA. Those who consumed higher levels of saturated fats from dairy products neither develop heart diseases nor died prematurely. Full fat dairy products are higher in

calories. That is what common man in India requires. The latest findings suggest that Ghee, Butter and any other fat rich products are as good as any other oils could be.

The take away message from Dr. Rajorhia was that the exploration of nutritive value of minor milk components proves that milk is not just a beverage, it is rich source of our overall well-being. So the next time you pour a glass of milk or enjoy a dairy product, appreciate not only its creamy taste but also the nutritional treasure it brings to your health.

Dr. Bimlesh Mann, talked on proteins and peptide. She said that apart from the intact protein in milk, the peptide in milk also has health benefits. These peptides are of various type: - they may act as anti-hypertensive, anti-oxidative, anti-carcinogenic, anti-diabetic, mineral binding peptides, etc. They directly protect us from the cardiovascular disease, type-2 diabetes, color actor cancer, osteoporosis, Alzheimer disease, etc. These are well-documented and published in the research paper of renowned international journals.

Shri Biswajit Dutta said that post Covid, people are looking for boosting immunity. To improve our gut health and immunity, fermented products like nutritifit, yoghurt, probiotic curd are very useful. Mother Dairy is fortifying Vitamins (A & D) in its milk for the benefit of the consumers.

According to **Ms. Ishi Khosla**, "it is undisputable to say that Milk is a powerhouse of nutrients. There is no two views about it and it has stood the test of time."

Dr. Prajapati summed up Panel 1 discussion by saying that milk and milk products is preventive for life-style diseases that includes Obesity, Hypertension and Type-2 Diabetes. None of the research report published says that milk and milk products cause such diseases. This should be well spread in the society to remove any confusion prevailing to anyone.

Sponsors of the seminar gave their presentations showcasing their products and services to the participants. While Shri Ashish K. Singh gave the slide presentation on behalf of Kanha Milk Testing Equipments Pvt. Ltd., Shri Rajdeep Maan gave a presentation for Maan Ventures.

Post lunch, Panel 2 discussion took place on "**Ensuring safer Dairy Products in the consumer basket**".

Prior to the Panel 2 discussion, **Chief Guest of the Seminar Ms. Varsha Joshi**, Additional Secretary (CDD/IT), Department of Animal Husbandry & Dairying, Gol, addressed the august gathering. While addressing,



Ms. Varsha Joshi said that I am grateful to Dr. Sodhi for organizing such event on my request. She further said that we are producing so much of milk and also consuming a lot. But are we adhering

to the safety and quality standards required that we should be? If we do not do so, how we are going to increase our share in dairy export. It is responsibility of FSSAI, state government and all of us have to work on it. IDA should guide the dairy sector on how the quality can be improved and how safe milk and milk products can reach in the consumer's hand.

The panelists for the Panel 2 were:- Shri Kuldeep Sharma, Founder, Suruchi Consultant; Dr. K.D. Aparnathi, Former Prof & Head, SMC College of Dairy Science; Dr. Rajan Sharma, Joint Director (Research), NDRI; Ms. Rajeshwari Sinha, Programme Manager, CSE; and Shri Vijay Sardana, Advocate, SCI; Techno-Legal Expert; and Corporate Advisor.



Shri Kuldeep Sharma was of the view that since independence there was not much focus on quality in the dairy sector. Investments were made in cooperatives as well as in building infrastructure. Spending on quality infrastructure were started at later stage. Training of staff is another area where we must look into. Although most of the dairy plants are holding ISO certificates, however, they are not following the guidelines on day-to-day basis. It is our constitutional right to have safe food.

Dr. Rajan Sharma said that currently we do not have the equipment to find out the adulterants in milk and milk products in a very short time as it is available to the blood testing labs for medical fraternity. However, he hoped that in the next few years, we will have such types of equipment.

Responding to Shri Kuldeep Sharma query, he said that



there is no acceptable limit for adulterants. As per currently available testing method, adulterants should be absent.

Dr. K.D. Aparnathi showcased through his presentation the real science behind testing the adulteration in ghee. He has invented Triglycerides method to detect the adulteration in ghee. It has been well accepted by the FSSAI.

Ms. Rajeshwari Sinha spoke on AMR issues. She said that if we do not manage the dairy waste products appropriately, we are eventually again adding AMR causing determinacy into this environment pool. We need to cater this as it will indirectly lead to safer food and safer water.

Shri Vijay Sardana spoke mostly on the administrative issues. His view was that we must be transparent in our guidelines. Administrative action and follow up should be visible to society through website. If any product is not up to the mark as per the testing lab or authorized agencies, it should be published online so that people can take a call themselves about it. During the panel discussion, he also offered his services through IDA to the Department of Animal Husbandry & Dairying, Govt, as and when required.

Shri Kuldeep Sharma summed up the Panel 2 discussion by saying that we must focus on primary production level to raise our milk quality. List of contaminants applicable for all or area-wise should be available on the website. Traceability through block chain method is the need of the hour whether it related to source of milking or upkeeping health status of milch animals. Finally, a non-negotiable parameters should be there to reject any product before it goes to the market.

Vote of thanks was presented by Shri Hariom Gulati, Secretary General, IDA.

International Conference on “Dairy Products in Human Health and Nutrition: Innovations and Opportunities” at Salem, Tamil Nadu

As a part of the Platinum Jubilee celebrations of the Indian Dairy Association (IDA), Tamil Nadu Chapter of IDA in partnership with Department of Nutrition and Dietetics, Periyar University organised a one-day International Conference on “**Dairy Products in Human Health and Nutrition: Innovations and Opportunities**” on December 14, 2023 at Periyar University, Salem in Tamil Nadu.

The international conference was designed to focus 5 major areas including Dairy Products and Health, Novel and Innovative Dairy Products, Probiotic Dairy Products, Innovative Dairy Processing, Safety and Quality and Entrepreneurial opportunities in Dairy sector for the benefit of the students and scholars of Food Science and Nutrition, Nutrition and Dietetics, Dairy Technology and Veterinary Science and also the faculty members of all the related fields.

During the inaugural session, Dr. R.S. Sodhi, President-IDA was the Chief Patron and Guest of honour, Dr. K.N. Selvakumar, Vice-Chancellor of Tamil Nadu Veterinary and Animal Sciences University was the Chief Guest and the Vice-Chancellor of Periyar University, Dr. R. Jagannathan presided over the function.

Dr. R.S. Sodhi, President-IDA joined the Conference virtually and delivered the Keynote address covering the outlook of dairy developments in India and health giving attributes of milk and also prioritizing the upliftment of the economy of small and marginal milk producers of our country. He also said that dairy products play an important role in both daily life and religious rites in India and are stapled in every house hold of India. Added to that millions of people especially women of rural India rely on the dairy industry for their livelihood.





Award being conferred for IDA-Dairy Women Farmer of Tamil Nadu for the year 2023

Shri C.P. Charles, CEC Member-IDA in his felicitation address briefed that dairy consumption is associated with good health, and recent meta-analyses data indicate that dairy consumption is

beneficial for weight management, coronary heart disease, Type-2 Diabetes, hypertension, and most cancers. Globally, dairy foods present a safe, affordable, and sustainable source of high-quality nutrition.

Shri. K.S. Kanna, Chairman, IDA Tamil Nadu Chapter briefed the gathering about the theme of Conference and also about the role of the IDA in facilitating knowledge exchange and networking opportunities for academia, industry professionals, scientists, and young researchers, in pursuit of its mission.

During the inaugural session, both the Vice Chancellors honoured the farmer- Mrs. Parmala Vijay Ramesh who was adjudged as the best IDA-Dairy Women Farmer of Tamil Nadu for the year 2023 and also handed over a cash award of Rs. 10,000/-

Similarly, a former CEC Member and Senior IDA member - Dr. Raja Rathinam, MD, UNDP Project-SKPCL, India was honoured by Dr. Satish Kulkarni and Shri C.P. Charles.

During the Conference, 13 lead papers were presented on the major areas of the focus by prominent speakers including 2 international speakers viz., Dr. Suresh V. Kuchipudi, University of Pittsburg School of Veterinary Public Health, Pennsylvania, USA and Dr. Gopi Hariharan from Kebri University, Ethiopia. Furthermore, a total of 30 oral presentations were made of original research findings in 5 concurrent session's viz., Novel

During the Presidential address, the Hon'ble Vice-Chancellor of Periyar University, **Dr. R.Jagannathan** emphasized that "Milk" known, as the nature's most complete food for millennia, comprising a basket of numerous beneficial nutrients and bioactive health promoting attributes, fits in as the perfect solution. The dairy products have added nutritional advantages and provide a convenient package of key nutrients. Furthermore, the array of available varieties, ease of inclusion in the diet and the dramatic shift of the consumer's preference to dairy products drives momentum to the dairy product industry.

Dr. K.N. Selvakumar, Vice-Chancellor, Tamil Nadu Veterinary and Animal Sciences University, Chennai in his Chief Guest address, opined that the dairy sector assumes a great deal of significance in India on various accounts and is intricately linked with livelihoods of millions of small milk producers and creation of wealth in the rural area. As an industry, it employs more than 8 crore people directly, with the majority being small and marginal farmers as well as the landless. Further, women constitute the major workforce of the dairy sector in the country. The sector is an important job provider, especially for women, and plays a leading role in women's empowerment.

During the felicitation address, **Dr. Satish Kulkarni**, Chairman, IDA (South Zone) pointed out that scientific considerations are necessary in the designing of dairy products, product diversification, adoption of innovative production and processing technologies, evaluation and validation of developed products including quality assurance, the safety concerns, and the export potential promotion initiatives.



Award being conferred for Painting Competition

Dairy products, Probiotic Dairy Products, Dairy Products enriched with plant ingredients, Dairy products & Health and Dairy Processing & Entrepreneurial Opportunities. Added to that, a cumulative total of 133 scholars very actively participated and presented their abstracts in E-poster sessions organized under 5 themes mentioned above.

As a part of the international conference, painting competition and cooking competition were also organized with themes "**Milk: The Nectar of Physical and Mental health**" and "**Milk based foods**" respectively. A total of 20 and 66 students took active participation in the painting and cooking competition respectively.

A total of 1100 participants were exposed to an interdisciplinary knowledge sharing platform comprising academicians, researchers, nutrition experts, microbiologists and food technologists. The conference addressed various innovative strategies and opportunities on probiotic Dairy Products, Novel Dairy Products enriched with plant nutrients, Dairy Processing, Safety and Quality and also entrepreneurial avenues so as to march towards the much needed proactive advancements.

During the Valedictory function, **Dr. K. Thangavel**, Registrar of Periyar University delivered the Chief Guest address and gave away the awards and prizes to the faculty members and scholars for the best oral and poster presentations and also to the winners of painting and cooking competitions as well.

It is fervently hoped that the outcome of the conference will immensely serve the dairy industry as a scaffold in establishing networking with fellow professionals, aid to formulate collaborative research programmes and to set forth a strong road map to enhance the continuing efforts to deliver nutrient rich dairy products for better health of the people world over.

Shri. K.S. Kanna, Chairman and Dr. T.R. Pugazhenth, Secretary, IDA Tamil Nadu Chapter acted as Conveners. Dr. A. Elango, IDA Fellow and the Dean, Veterinary College and Research Institute, Salem and Dr. S. Parameswari, Professor and Head, Department of Nutrition and Dietetics, Periyar University, Salem acted



NATIONAL News

Shri Parshottam Rupala Inaugurated Animal Health Conclave



Hon'ble Union Minister of Fisheries, Animal Husbandry & Dairying Shri Parshottam Rupala inaugurated the Animal Health Conclave - Shaping Animal Health Sector with Innovative Vaccines & Precision Diagnostics at Delhi in the gracious presence of Dr. Abhijit Mitra, Animal Husbandry Commissioner, Gol; Dr. Meenesh Shah, Chairman NDDB & Indian Immunologicals Limited; Dr. Sarita Chauhan, Joint Secretary (LH); Dr. Anand Kumar, MD, Indian Immunologicals Limited; officials from Dept. of AHD & Food and Agriculture Organization of the United Nations (FAO); Animal Husbandry Directors from Indian states and vaccine manufacturers.

During the inaugural session, the Hon'ble Minister emphasized the need to expedite the commercialization of vaccines in the country and expressed pride in India's emerging status as a global leader in this field. The Minister assured the continuous support of Ministry of Fisheries, Animal Husbandry and Dairying and outlined the adoption of Ayurvedic formulations in veterinary medicine with focus on the 'One Health' approach.

Speaking on the occasion, Dr. Abhijit Mitra, Animal Husbandry Commissioner assured that the Department of Animal Husbandry and Dairying, Min of FAHD would actively facilitate the implementation of technologies in the field for advancements in the sector.

In his address, Dr. Meenesh Shah, Chairman, NDDB emphasized the importance of addressing health issues, particularly zoonotic diseases with Gol initiatives like the establishment of One Health Support Unit and implementation of programmes targeting specific

diseases. He touched upon the importance of addressing antimicrobial resistance with the extensive use of traditional Ayurveda formulations and highlighted the digitization process through the NDLM which is also crucial in providing necessary data. Dr. Shah apprised the august gathering about NDDDB's efforts to standardize wearable devices for animals and explore innovative techniques like muzzle mapping.

NCDFI Celebrated 53 Years of Serving Farmers on its Foundation Day at Gangtok



National Cooperative Dairy Federation of India Ltd. (NCDFI) marked an important milestone on December 07, 2023, as it celebrated 53rd Foundation Day in an event held at Gangtok, Sikkim. The celebration, graced by the esteemed presence of Chief Guest Shri Lok Nath Sharma Ji, the Hon'ble Minister of Animal Husbandry and Veterinary Services, Govt. of Sikkim, witnessed a gathering of distinguished personalities from the dairy industry, government officials, and other stakeholders.

Shri Lok Nath Sharma Ji, commended the pivotal role

played by NCDFI in the progress of the dairy sector. He expressed pride in the fact that Dr. Mangal Jit Rai is the first Chairman of NCDFI from the North-East region. The event was also attended by Dr. Sharman Rai, Secretary AH&VS, Govt. of Sikkim; Shri Sudip Pradhan, Independent Director of Numaligarh Refinery Limited and Chairman, CSR; Shri Yong Tshering Lepcha, Hon'ble MLA, Gangtok (BL); Col Jay Sanan, Commanding Officer, 517 ASC Bn, along with the Chairman, MD and staff members of NCDFI.

Preceding this celebration, NCDFI successfully conducted a Management Development Programme (MDP) at Sikkim State Cooperative Union (SICUN) during December 04-06, 2023. This singular format facilitated enhanced networking among 48 senior officials from 18 states and allowed them to participate in NCDFI's Foundation Day Celebrations in Gangtok.

With over 300 participants, including government officials, representatives from various dairy cooperatives, dairy farmers, and members of the press, the celebration became a platform for fostering collaboration and sharing insights within the dairy community.

As a highlight of the celebration, NCDFI, in association with NDDDB Dairy Services, introduced a new initiative - Farm Equipment Solutions. This initiative aims to modernise dairy farming practices, and it was officially launched by Shri Lok Nath Sharma Ji. In a proactive move, NCDFI also provided a comprehensive set of farm equipment for a Smart Model Farm, aiming to enhance efficiency and promote sustainability. The equipment, including a Milking Machine and Cow Mats generously donated by IDMC, was presented to farmers during the event. Shri Nilesh Darji, Chief ICT Officer of IDMC, was present during the presentation of this equipment to the farmers. Additionally, Sikkim Milk Union pledged its support in launching the initiative in Sikkim. The gesture aims to empower dairy farmers and other stakeholders in the dairy industry, propelling the sector towards



adopting advanced technologies for a brighter and more sustainable future.

The Foundation Day included an Institutional Sales Award Function for the North-East region. West Assam Milk Union secured the 1st position as the highest supplier of milk to the Indian Army during 2022-23, followed by Sikkim Milk Union in the 2nd position and Dimapur Milk Union in the 3rd position. Further, NCDFI presented continuous patronage and guidance award to NDDB, reinforcing collaborative efforts towards achieving dairy excellence in the North-East region. NCDFI extended gratitude to North-East dairy cooperatives for their consistent milk supply to the armed forces and acknowledged the Indian Army's unwavering support.

In conclusion, NCDFI's 53rd Foundation Day celebration not only highlighted its rich history but also showcased its commitment to innovation, collaboration, and sustainable development in the Indian dairy industry. The event served as a testament to the strides made and the vision for a brighter future in the realm of dairy farming.

Kenyan Delegation Met Chairman, NDDDB to forge a Long term Strategic Partnership with NDDDB

The Kenyan delegation met Dr. Meenesh Shah, Chairman, NDDDB and other senior officials of NDDDB and its subsidiaries and Amul. During the concluding meeting a detailed presentation was made to the Kenyan delegation on activities of NDDDB and its subsidiaries. The delegation appreciated NDDDB's efforts and expressed keen interest in collaborating in key areas like import of vaccines and establishing manufacturing facility, import of dairy equipment including milking machines, chilling and processing equipment, packaging machines, etc. They were also interested in receiving technical know-how support for implementing genetic improvement programmes with import of high quality semen doses, dairy herd being some of the immediate steps. The Kenyan delegation expressed their desire to



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forge a long term strategic partnership with NDDDB with a focus to develop the Kenyan dairy sector to provide livelihood and nutritional security to dairy farmers and consumers.

‘National Lifetime Achievement Award - Dairy’ for Shri K.L. Arora

Shri K.L. Arora - a Fellow member of IDA, was bestowed with "National Lifetime Achievement Award - Dairy" on August 26, 2023 at Sofitel Mumbai BKC in Maharashtra, during MSME and Startup Innovation Summit and Awards - 3rd Edition, for his outstanding contribution towards the development of Rural and Urban areas, globally, in the field of Dairy. This prestigious accolade is supported by the Government of India, presented by Freight Crate and hosted by Summentor Pro. The Award was presented by Shri Narayan Rane, Hon'ble Union Minister of MSME, Govt. of India, in the said summit, in presence of an august gathering.

Shri Arora is also the recipient of Rural Development Excellence Award 2021-22, Lifetime Achievement Award (MSME Innovation & Start - Up Summit : 2020), Excellence Award by Institute of Economic Studies, International Business Excellence Award from International Business Productivity Forum, and Udyog Rattan Award, etc.

Shri K.L. Arora is Chief Executive of MAXCARE Marketing & Technical Services: an ISO 9001: 2015 organization since 1993 and has successfully executed several turnkey projects in Afghanistan under global tenders of FAO of United Nations, besides Sri Lanka and Iraq, etc. Shri Arora has served IDA as a CEC Member for a very long time was conferred with IDA Fellowship in 2016. IDA congratulates Shri Arora for the Life Time Achievement.



Gyan Dairy Raises its Daily Milk Production Capacity

Gyan Dairy, a unit of CP Milk & Products Ltd, has increased its milk production capacity to 15 lakh litres a day from 11 lakh litres a day.

A media statement said the company has set up a plant in Gorakhpur with a capacity of 5 lakh litres a day, at a cost of approximately Rs. 120 crore. The plant is spread over 20,067 sq m. With the establishment of this plant, over 1,800 direct and indirect jobs have been generated. Over 1 lakh cattle-rearing families will be benefited, it said.

Quoting Shri Jai Agarwal, Managing Director, CP Milk & Food Prod Pvt. Ltd., the statement said: "We had started our journey in 2007 with just two products in our portfolio, namely Gyan Skimmed Milk Powder and Gyan Desi Ghee. Milk was procured from the market and transported to our plant. The income from the sale of milk had gone to middlemen, depriving dairy farmers of fair compensation for their produce."

Stating that the situation is different now and everything has changed considerably over the last six-seven years, Shri Agarwal said the company has plants in Lucknow, Barabanki, Varanasi and Gorakhpur with an increased capacity of processing 15 lakh a day and providing a range of packaged milk and other dairy products such as dahi, paneer, khoya, butter, ghee and dairy-based beverages such as lassi, chaach, etc. The company's products are available across the country via a network of over 50,000 retailers and over 50 'Gyan Fresh' stores.

Shri Agarwal said the Uttar Pradesh dairy market is flourishing due to the State government's supportive policies. The government provides incentives and support for dairy development, including supporting milk cooperatives and rural milk producers, setting up Greenfield dairies in cities such as Gorakhpur, Ayodhya, Kanpur, Lucknow and Bareilly.

"Technological advancements such as improved milk procurement networks are accelerating dairy product adoption. Road infrastructure improvements have facilitated direct milk transportation to dairy farmers, increasing income," Shri Agarwal added.

NDDB Pitches for Boosting Dairy Exports as Milk Output is Set to Rise

With India set to increase its share in the global milk production over the next decade, it is time to look at expanding the share in export market, said Dr. Meenesh Shah, Chairman, NDDB.



Addressing the 20th Convocation of The Indian Institute of Plantation Management, Bengaluru (IIPM-B), Dr. Shah said India currently accounts for 24 per cent of the world's milk production. India's milk production has been growing at a CAGR of 6 per cent, while the world average is at 2 per cent.

"If this growth trend continues, over the next 7-10 years, we will have a one-third share in the global output," Dr. Shah said adding that it is very important for India to look at enhancing its share in export market to sustain growth in milk production.

India's share in the world dairy market is less than 0.5 per cent. Dairy exports are largely targeted to cater to the demand of our diaspora. India is uniquely positioned to cater to the world market, especially to the countries in South-East Asia, neighbouring Sri Lanka, Bangladesh and also in West Asia which are import dependent for the milk products, he added.

The dairy value chain could be replicated in other food value chain segments to reduce wastage and improve supplies, he said.

Govt. Implements National Programme for Dairy Development

Department of Animal Husbandry and Dairying, Government of India is implementing "National Programme for Dairy Development (NPDD)" scheme across the country since Feb-2014, with an objective of creating/strengthening of infrastructure for Production of quality milk, Procurement, Processing and Marketing of Milk & Milk Products. The scheme has been restructured/realigned in July 2021, for implementation from 2021-22 to 2025-26 with a total budgetary allocation of Rs. 1790 crore having two components:

Component 'A' focuses towards creating/strengthening of infrastructure for quality milk testing equipment as well as primary chilling facilities. Component 'B' (Dairying through Cooperatives) aims to increase sales of milk and milk products, upgrading dairy processing

facilities and marketing infrastructure and enhancing the capacity of producer-owned institutions.

An amount of Rs 345.93 crore has been allocated (Budgetary Estimate) under both Component 'A' and Component 'B' (Dairying through Cooperatives) of the scheme during 2023-24.

Under Component A of the scheme, 195 projects in 30 States/UTs have been approved with the total outlay of Rs 3311.10 crore (including Central Share Rs 2479.06 crore). A total amount of Rs.1824.60 crore has been released to States for the implementation of these projects against which Rs. 1429.62 crore has been utilised. Under Component B of the scheme, 22 projects in 8 States have been approved with a total outlay of Rs 1130.63 crore.

A total amount of Rs 84.02 crore has been released to National Dairy Development Board for the implementation of the projects. About 16,794 dairy cooperative societies have been organized/revived, 30,066 Automatic Milk Collection Unit have been installed and about 82 dairy plants have been strengthened with creation of 24.00 lakh litres per day additional/new milk processing capacity under the scheme.

INTERNATIONAL News

International Dairy Market: Overview

As per the latest USDA data of mid December, 2023, international market overview are as follows:

EUROPEAN

Western European

Some dairy sources are reporting weekly Western European milk deliveries are starting to increase following the low point of the milk production season. The extent of milk output growth varies as widely as the extent of early wintry weather in some regions. While seasonal growth is imminent, uncertainties persistent whether the new milk production season will meet processing need expectations. Perceived tightness of milk for processing has kept milk pay prices stable. Dairy processors have pay prices largely in the 40 to 50 euros per 100 kilograms of milk. Recently, a large European dairy cooperative announced their December guaranteed pay for farm milk at 46.31 euros per 100 kilograms. The price increased by 4.06 euros compared to November because of tight milk supplies and healthy cheese demand within the EU. Weekly spot prices in some regions

of Europe are between 50 and 60 euros per 100 kilograms of milk.

The European Parliament has approved the free trade agreement between the EU and New Zealand. Once the agreement is ratified by New Zealand, it will take effect, possibly as early as Q2 2024. The EU Council also signed the EU-Chile free trade agreement, which now awaits final approval by the European parliament before it can be put in place. However, some issues could not be settled to advance the EU-Mercosur free trade agreement toward approval.

Four additional cases of cattle with bluetongue disease have been identified within the United Kingdom. The disease is an insectborne, noncontagious disease that affects cattle and sheep. The disease can cause mortalities and high morbidity among impacted animals. The four cases were detected through the temporary control zone that set up surveillance after the first cow with bluetongue was detected in early November.

Eastern European

Some Eastern European countries have maintained their steady increase in milk output throughout 2023. According to CLAL data made available to USDA, October 2023 cows' milk delivered to dairies in Poland was 1,043,000 MT, up 1.8 percent from October 2022.

In the Czech Republic, October 2023 cows' milk delivered to dairies was 263,000 MT, up 1.7 percent from October 2022. Year-to-date milk deliveries through October 2023 in Poland, 10,895,000 MT, increased 1.5 percent compared to year-to-date milk deliveries through October 2022. And in the Czech Republic, year-to-date milk deliveries through October 2023, 2,700,000 MT, increased 1.6 percent compared to year-to-date milk deliveries through October 2022. Both countries have had positive milk growth for the first 10 months of 2023.

Ukrainian agriculture continues to struggle to export grain into world markets. Before the conflict with Russia began in March of 2022, Ukraine was the world's fourth largest grain producer and one of the larger Eastern European dairy production countries. Since the conflict began, a Ukrainian agricultural trade association estimates the country's agricultural sector has incurred over \$25 billion in losses. The economic pressures are mounting for cash-strapped farmers. Ukraine's efforts to reopen the Black Sea ports are critical to the viability of Ukrainian agriculture. Ukrainian farmers are hopeful that opening the ports, along with other land routes and shipments via the Danube River system, could bring exports closer to the pre-war levels of 5-6 million tons of grain per month.

OCEANIA DAIRY MARKET

New Zealand

At GDT event 345, prices moved higher for most commodities offered, with only anhydrous milk fat remaining flat from event 344. During the event, mozzarella cheese was traded for the first time, with loads trading during one contract period from Europe. Industry sources indicate bullish movements during the event were not entirely unexpected, due to market conditions in Oceania.

The Free Trade Agreement negotiated between the European Union and New Zealand was approved by the European Parliament recently. This agreement is still pending approval through the New Zealand parliament, some industry experts forecast this could contribute to an increase in trade between the regions by around 30%.

New Zealand recently participated in the United Nations' COP28 climate summit and signed onto an agreement with 134 countries pertaining to agriculture and food production. The goal of this agreement is to aid in adapting to climate change. Participants aim to do this through several methods including: the reduction of greenhouse gas producing practices, promoting sustainable production and consumption, and reducing food loss and waste.

Australia

Milk production data in Australia for October was recently released which indicated an increase in output during the month compared to one year ago. Milk production increased compared to October of 2022 in most regions, with the only decline present in South Australia. Milk production from the start of the 2023/2024 season is higher compared to the prior season overall, with declines present only seen in South Australia and Victoria.

Last month Dairy Australia released the Dairy Industry In Focus 2023 report, discussing the 2022/2023 production season in the country. This report discussed that there were historically high farmgate milk prices in the country during the 2022/2023 season, while milk production declined by 5 percent during the season. This report conveys that Australia is the 5th largest country in terms of dairy exports in the world, and around 30 percent of milk produced in the country was exported during the 2022/2023 season.

Dairy Australia recently released the Situation and Outlook report covering dairy markets during December, 2023. This report states imports are becoming more attractive in the country due to the premiums higher prices seen on domestic products compared to commodities

produced in international markets. High prices are also having a negative impact as the report relays a decline in volumes sold at grocery stores as purchasers are relying on smaller pack sizes or reducing their consumption. Higher farmgate milk prices in Australia, increased competition from international suppliers, and decreased consumer demand have put pressure on the nations dairy processors.

SOUTH AMERICA DAIRY MARKET

Summer months are nearing, but contacts say summer temperatures are already creeping in within some areas of the region. Despite some relief in the form of precipitation following the years-long drought, Argentina and Uruguay continue to face limitations regarding soil moisture levels. Brazil's breadbasket, Mato Grosso, continues to face atmospheric challenges, as well. Corn and soybean estimates from that state are regularly being checked lower due to a very dry spring season.

As the holiday season approaches, contacts in the region expect dairy commodity trading to slow down markedly. Brazilian contacts suggest if import prices do not level off or decline, purchasing from the largest importer in the region may slow significantly before the end of the Q1 2024. A number of contacts say contracts have already been worked through for the first quarter, as next week will likely be the last active trading week in the region. Mexico continues to purchase commodities from the region at steady pace, according to regional reports. Casein, whole milk powder, and cheese values are also trending slightly higher in the region.

GDT Prices Index Up 2.3% from the Previous Event

On December 19, 2023, at GDT Event 346 index price went up by 2.3%. Previous Global Dairy Trade Event 345 was held on December 5, 2023.

Whole milk powder has reached an average of US\$3207/MT, with a 2.9 per cent increase.

Skim milk powder - There is a decline of 1.3% percentage in GDT Index Price. Weighted average price \$2620.

There is a little increase of 0.2 per cent in Anhydrous Milk Fat GDT Index Price to an average of US\$5578/MT.

In Butter, there is a big increase of 9.9 per cent in GDT Index Price to an average of US\$5458/MT - and cheddar - increase of 6.9 per cent to an average of US\$4265/MT.

31,222 MT of product was purchased by 108 successful bidders.

Global Milk Production Contracting, Analyst Says

Global dairy demand is holding up, but milk production is starting to contract, a dairy analyst says.

Weather conditions are influencing production in Australia and the European Union, and production growth in Oceania and Europe is challenged by new environmental regulations. "We're starting to see some headwinds to long-term growth," Dustin Winston, dairy analyst with StoneX, said during the University of Idaho Ag Outlook Seminar.

In the US, milk production was below year-earlier levels July through November, according to USDA.

Dairy cow slaughter was running strong at the beginning of the year, laying the foundation for slower production growth. But the slaughter rate has slowed dramatically in the last few months, he said.

"We will need to keep slaughter levels low moving into 2024 in order to have enough milk to fill the additional processing capacity coming on board at the end of 2024 and into 2025. The herd will need to grow in order to meet the needs of this new capacity," he said.

But growing the herd will take some time because dairy farmers have been culling cows faster than they can be replaced. Although the U.S. has turned back slaughter levels, USDA has been reporting a decline in the herd over the last several months, which tells him the level of replacement heifers is low, he said.

"Currently, it is very expensive to buy a replacement heifer, but if a farmer needs the cow then there aren't many options to avoid paying unless they are looking to slim their herd size," Analyst said.

There's been a little improvement in the gross margin as a result of lower feed costs. Idaho's feed costs have come down and are looking flat, with a gross margin of about \$6 to \$7 per hundredweight of milk, he said.

The Class III milk price is increasing and is about \$18 to \$18.50 cwt. now in the futures market. Components in Idaho's milk bring an additional \$3 cwt, so milk prices in Idaho are about \$21 to \$22 cwt., he said.

"I expect margins to continue to improve in 2024 as feed costs are likely to stay at these levels given the large (corn) crop expected globally. We do expect milk prices to improve a bit as well," he said.

With milk supply a little short and new capacity coming on, he expects a bit of a bidding war on milk. Domestic demand has been holding up, and foreign buyers will be looking to the US in the first half of the year because US prices are the lowest in the global market. He expects US milk production to grow in 2024 if margins improve

to support farmers' interest in growing. Global milk production might lag a bit with constricted growth in Europe and New Zealand.

Slow Recovery in Dairy Commodity Prices Expected: Rabobank

There is growing evidence that the bottom in the dairy commodity markets has passed, but a "slow recovery" is likely as prices move back to long term averages, Rabobank warned on December 5, 2023.

The bank's latest Global Dairy Quarterly report highlights that limited milk supply growth and "lackluster" demand led to soft commodity pricing this year but the bank expects prices to "move higher" next year.

EU dairy commodity prices have strengthened from mid-August to mid-November it also noted.

"The base case is for a slow recovery in commodity prices. A high degree of risk and uncertainty permeates all global markets include dairy," the report outlined.

Rabobank said any recovery in commodity prices will be against a backdrop of "geopolitical instability risks, volatile energy markets and weak macroeconomic conditions".

It also highlighted that demand will be a key factor to monitor next year with key challenges remaining on the horizon including high dairy inflation.

According to the latest Rabobank report China's import appetite for dairy commodities is expected to "flat line" in 2024 which it said would be a positive result because there has been a "withdrawal from the global markets" over the last two years.

Separately Rabobank's milk supply outlook for 2024 has "weakened" with sluggish growth expected across most export markets.

"It's a complex story of high dairy inflation, broader cost of living issues and weak consumer confidence remaining on the horizon," Rabobank detailed in its latest report.

In the EU it expects that milk supply is moving into a "year on year decline" on the back of weak farm margins, "high comparable" and unfavourable weather conditions.

Rabobank expects milk prices to strengthen in quarter one next year due to recent improvements in underlying European dairy commodity prices. A change in position from the trend over the last 12 months when EU milk prices fell back dramatically.

"For Germany, the Netherlands, Ireland and Denmark

the year on year decline exceeded 30%," Rabobank highlighted. However, Rabobank said that with the 2024 feed cost outlook looking "more favorable", some regional milk prices have recently increased, and boosting farm gate margins.

"Several large dairy processors in northwest Europe have already announced higher milk prices for November and December," the report outlined.

Camel Milk Set to Provide Sustenance for Saudi Arabia's Economic Transformation

Saudi Arabia is currently one of the biggest producers of camel milk and a host of new ventures are making the business a lucrative one in the transformation of the country's economy.

The Kingdom has an annual output of approximately 0.271 million tons of the product, and Saudi Arabia's sovereign wealth fund has set up a new firm, Sawani Co., to catalyze the growth of the sector as part of its efforts to transform the country's economy.

The move comes at a time when the Public Investment Fund's various investments in the Saudi food and agriculture sector to support its produce industries gain momentum.

"Saudi Arabia has extensive experience and knowledge of the camel dairy industry, and enormous potential to expand its operational capabilities and wider ecosystem," said Majed Al-Assaf, head of Consumer Goods and Retail in the Middle East and North Africa Investments Division at PIF, in a statement.

He added: "These factors represent a competitive advantage across the entire supply chain, which will enable significant growth of the industry, and eventually lead to the export of camel dairy products to regional and global markets."

Ahmed Gamaledeen, CEO of Sawani, affirmed the company's position in its sector, telling Arab News: "Sawani Co. has an essential role to play in elevating standards within the camel dairy sector. Based in Saudi Arabia with a global reach, our organization seeks to actively contribute to the development of the sector, highlighting the merit of camel-based products from both a health and commercial standpoint."

He added: "We are committed to raising awareness of camel products through our operations and initiatives, helping to continue a longstanding tradition of sustainable camel milk production to serve Saudi Arabia, the region and other parts of the world."

While seeking to become a leading producer of camel dairy products, the company will also place sustainability at the center of all stages of production, distribution, and marketing as well as raise awareness of the health benefits of camel dairy products among consumers.

Sawani looks to work with the private sector to boost production capacity and drive sustainable growth of the camel dairy industry.

This includes raising the standards of the domestic production ecosystem through modernizing operations and introducing best scientific practices, improving knowledge localization and transfer and investing in the sector's latest manufacturing technologies.

Highlighting the company's aspirations within the camel dairy industry, Gamaledeen said Sawani has both regional and international ambitions.

"With a myriad of health benefits associated with camel-based products, our aim is to showcase the product's commercial viability as a solution for consumers who are lactose intolerant, diabetic or seeking nutrient-dense dairy products," he said.

Nestlé Develops N3 Milk with New Nutritional Benefits

Nestlé has announced that it has developed N3 milk. Made from cow's milk, it has all the essential nutrients found in milk such as proteins, vitamins, and minerals. In addition, it contains prebiotic fibre, has a low lactose content and has over 15% fewer calories.

To develop the N3 milk, the company used a proprietary technology to reduce lactose - a sugar found in cow's milk - through specialized enzymes thereby generating beneficial prebiotic fibres. Clinical studies showed that these fibres promote the growth of multiple types of bifidobacteria by up to three-fold, delivering gut microbiome benefits in healthy adults.

The milk has been introduced in a new range of powdered milks in China under the N3 brand. This includes a full cream and a skimmed milk product, both of which are high in protein to support a well-balanced diet for the entire family.

As people age, they require specific nutrients to maintain their overall health and well-being. Therefore, to support healthy aging, the company N3 range includes two products that are fortified with vitamins, minerals, and probiotics to support bone health, muscle growth and strength, as well as immunity.

Stefan Palzer, Nestlé chief technology officer, said, "We are excited to launch this unique science-based innovation that contains all the key nutrients of milk but

is low in lactose and contains special prebiotic fibres that are associated with various health benefits. This milk will serve as a base for the next generation of nutritious products which will benefit many consumers including people with lactose intolerance, and those who want to improve their gastro-intestinal health. It's also a testament of our efforts to develop cutting-edge technologies that can be applied across different categories, brands and geographies."

Japan to Use Fuel from Cow Dung to Power its Rockets!

In 2017, a Kolkata-based company launched extremely cheap and environment-friendly biogas-fueled buses on the Indian streets. Five years later, such biogas-run buses were being deployed in Indore as well. Now, a Japanese space start-up has taken this a step further, by adopting a similar technology to power rockets!

Japan's space industry opened a new chapter recently with the successful test of a prototype rocket engine powered by fuel derived entirely from cow dung. The experiment saw the engine blast out a blue-and-orange flame for around 10 seconds in the rural northern town of Taiki. The liquid "biomethane" used in the test was made entirely from gas derived from cow manure collected from two local dairy farms.

The general consensus about this moo-ve is that it could benefit both space travel and agriculture. Interstellar Technologies CEO Mr. Takahiro Inagawa explained that cow dung is not only environmentally friendly but also cost-effective and delivers high performance. "We are doing this not just because it is good for the environment but because it can be produced locally, it is very cost-effective, and it is a fuel with high performance and high purity," Mr. Inagawa said.

Interstellar Technologies has teamed up with industrial gas producer firm Air Water to develop this innovative fuel. While the former worked with local farmers who have equipment on their farms to process the manure into biogas, the latter collects the biogas and turns it into rocket fuel.

Eiji Mizushita, a local farmer participating in the initiative, contributed dung from his herd of 900 cows, which produce over 40 tons (about 36,000 kilograms) daily. His farm utilised an automated system to collect, ferment, and process the manure into biogas, fertiliser, and bedding materials.

While the income generated from biogas sales was minimal, Mizushita found the project rewarding. He believes that utilizing cow dung for space exploration is exciting and emphasizes the importance of proper manure disposal and the need for government and

societal support for renewable energy production.

This renewable source of energy helps mitigate the enormous environmental footprint of agriculture, which Greenpeace says is responsible for 14% of greenhouse gas emissions worldwide.

Meanwhile, the "Moon Sniper" mission launched by Japan's space agency, JAXA, in September has suffered setbacks in recent years with several failed missions. But the successful test of this cow-dung-powered rocket engine now offers a promising new chapter for Japan's space program and a potential solution for the global energy crisis.



50th GOLDEN JUBILEE DAIRY INDUSTRY CONFERENCE

March 4-6, 2024

Programme

FIRST DAY

March 04, 2023 - Tentative Schedule

9.30 - 10.00 am:

Inauguration of Exhibition – Chief Guest

10.00 am - 12.00 pm

Inaugural Programme

12.15 - 1.30 pm

Memorial Lectures - (i) Dr. Verghese Kurien and (ii) Prof. M.R. Sreenivasan

2.30 - 5.00 pm

Farmers' Session - 1 and Farmers' Session - 2

3.00 - 4.30 pm

Commercial Presentations (4 Nos - parallel session)

4.30 - 6.00 pm

CEO Session - Panel Discussion

7.00 - 8.00 pm

Cultural Programme

8.00 - 9.00 pm

Dinner