IDA News

IDA (SZ) Brainstorming Session and 50th DIC Curtain Raiser Program at Bengaluru

Indian Dairy Association (South Zone) organised 'Brainstorming Session on Reorienting Zonal Activities of IDA' and also '50th DIC Curtain Raiser Program' on January 19, 2024 at Bengaluru. This program was organized on the occasion of the 'Platinum Jubilee Year' of IDA.

The Guests of Honour of the program were Dr. R.S. Sodhi, President-IDA; Shri A.K. Khosla and Shri Arun Patil, Vice

Presidents of IDA. Dr. Satish Kulkarni, Chairman, IDA (SZ) presided over the program. While speaking on the occasion, Dr. Satish Kulkarni highlighted the various new initiatives of IDA (SZ). He emphasized on strengthening the secretariats of Zonal and Chapter offices so that more number of activities can be organized. Shri Arun Patil stressed on increasing the membership of 'Milk Producers' and 'Dairy Industry' Categories. Shri A.K. Khosla emphasized on improving the IDA outreach programs and holding the membership drives to increase the membership base of IDA.

Dr. R.S. Sodhi, congratulated and appreciated the initiatives taken by the IDA (SZ) and assured that such novel initiatives will be adopted by the others zones of IDA. Further, Dr. Sodhi emphasised on improving the communication of IDA activities among various stakeholders and providing the policy advocacy to the

governments so as to take the dairy industry to desired heights. During the interactive session, various members expressed their ideas to re-orient, re-invent the activities of IDA.

The suggestions were deliberated on Strengthening the secretariats of Zonal and Chapter offices of IDA; Organising the 'Regional Dairy Summits' to address the



local dairy issues; Increasing the number of Chapters; Recognition the Best Women Dairy Farmers and successful Dairy entrepreneurs; Tripartite agreement among IDA, Dairy Research Institutes and Dairy Industry; Supporting innovative students research projects; Improving the awareness among the general public about IDA; Providing policy advocacy from Zonal to National Level, etc.

During the occasion, a Curtain raiser presentation on the 50th DIC was made by Shri C.P. Charles, Secretary General of the conference, and a video was released on the occasion. Earlier, Dr. S. Subash, Secretary, IDA (SZ) delivered the welcome address and Dr. B. Surendranath, Member IDA (SZ) delivered vote of thanks and compered the program. The program was attended by more than 80 members of IDA, dairy professionals and other stakeholders.



Best Women Dairy Farmers Award Ceremony

Indian Dairy Association (South Zone), Bengaluru organised 'Best Women Dairy Farmers Award Ceremony' on January 20, 2024 at Bengaluru. This program was organized on the occasion of the 'Platinum Jubilee Year' of IDA. It is a unique initiative of IDA (SZ) to honour the best women dairy farmers from Southern States. Five Dairy Women Farmers from the states of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Kerala were felicitated recognizing their entrepreneurial zeal and producing milk ranging from 60 liters per day to 400 liters per day.

The award carried a certificate, memento, and cash award of twenty thousand rupees. The awardees are Smt. A.N. Rajeshwari from Karnataka, Smt. Aligeneni Sree Padma from Andhra Pradesh, Smt. Dabbu Padma from Telangana, Smt. Leema Roselein from Kerala and Smt. Parimala Vijayaramesh from Tamil Nadu.

The Guests of Honour of the program were Dr. K.C. Veeranna, Vice Chancellor, KVAFSU, Bidar; Dr, Basavaraj, Director (AH), KMF; Shri Rajeshwar Rao C, Chairman, IDA Telangana Chapter; and Dr. R.S. Sodhi, President-IDA. Dr. Satish Kulkarni, Chairman, IDA (SZ) presided over the award ceremony. While speaking on the occasion, Dr. Satish Kulkarni emphasized on improving nutritional status of dairy farmers besides improving their socio-economic status. Dr. K.C. Veeranna, appreciated the efforts of IDA (SZ) in recognizing the



best women dairy farmers from Southern India, which in turn would motivate other fellow dairy farmers to excel in their dairying activities. Dr. Basavaraj highlighted the various pro-farmer initiatives and programs of KMF in supporting their dairying activities in Karnataka State. Shri Rajeshwar Rao, appreciated the role of women in every sphere of our life and dairying is no exception to it as most of the dairying activities are carried out by the women dairy farmers.

Dr. R.S. Sodhi, while congratulating all the awardees, assured that such novel initiatives will be adopted by the others Zones of IDA. Further, Dr. Sodhi appreciated the efforts of women milk producers in positioning our country at the top at global level. He explained that the contribution of dairying itself contributes about 4% of GDP and currently India accounts for 25% of world milk production. In the next decade the contribution is likely to increase to 40% of world milk production, he added.



A Curtain raiser presentation on the 50th DIC was made by Shri C.P. Charles, Secretary General of the conference, and a video was released on the occasion.

Shri S.K. Bhat a member of the association was felicitated for completing 50 years of membership and members proposing the best themes for the 50th DIC were awarded.

Earlier, Dr. S. Subash, Secretary, IDA (SZ), delivered the welcome address and Dr. S.N. Rajkumar, Chairman, IDA Kerala State Chapter delivered vote of thanks. Dr. B. Surendranath, Member IDA (SZ) compered the award ceremony. The program was attended by more than 200 persons, comprised of women dairy farmers, members of IDA, dairy professionals and other stakeholders.

National Conference on "Smart and Sustainable Dairy Farming" Organized at Pune

National conference on "Smart and Sustainable Dairy Farming" was organized by Indian Dairy Association (West Zone) in association with Indigenous Cattle Research cum Training Centre (ICRTC) of Mahatma Phule Krishi Vidyapeeth, Rahuri (MPKV) and BAIF Development Research Foundation at Agriculture College, Pune during January 5-6, 2024. The program was attended by about 300 delegates representing academic institutions, private

and cooperative dairies, other dairy related companies and students.



The grand opening of the conference began with paying tribute to Mahatma Phule in front of heritage building of Agriculture college and celebration procession to Shrimane Hall. Dignitaries opened the poster session and exhibition before entering the hall. Inauguration session was started by invocation of goddess Saraswati and lighting of lamp by the dignitaries. Ms. Richie Agarwal, ZEC Member-IDA (WZ), anchored the inaugural session.

Dr. J.B. Prajapati, Chairman, IDA (WZ) welcomed the guests and felicitated them. He thanked Dr. P. G. Patil, Vice Chancellor, MPKV, Rahuri for making this conference a reality. He also mentioned that it is important for the Agriculture scientists to come together with the industry and discuss the ways in which dairy farming can be made sustainable. He explained the importance of the theme of the seminar and insisted that farmers and dairy professionals have to be smart to keep our business sustainable, which is a livelihood

for millions of families across the country.

Dr. B.K. Kakade, President, BAIF talked about the initiatives of BAIF in the area of animal genetics, breeding, nutrition, and scientific management. He also pondered upon the challenges and opportunities in dairy production sector.

Dr. R.S. Sodhi, President-IDA said that the smart word is not only



required in the dairy sector, but in the entire food sector. He said that to make the food industry sustainable, it has to be commercially viable for the farmer producer and the consumer needs to get good food products in affordable price range. The producer cannot do charity but definitely needs commercial viability to be able to continuously produce and provide good food items to the consumer. In the coming 25 years the rural urban population ratio is going to become 50:50. We need to remember, the food that will sell or we need to grow is tasty, with pure natural nutrition, and affordable.

He mentioned that one major worry for the industry is fighting adulteration, which leads to low consumption due to loss of trust of consumer. India is world's largest and fastest growing economies, which leads to all large food companies in the world trying to come into the country to sell their products. This leads to loss of income of the farmers. Thus, we need to make the Indian production system more efficient by reducing the input cost of farmer and improving feed conversion ratio of dairy cattle. It is very efficiently managed by poultry industry and needs to be brought more into focus in Dairy industry.

On the other hand, conceiving ratio of almost 25% cattle is zero. Thus, we need to focus on this in the dairy cattle. Energy consumption needs to be reduced in the entire value chain. Digital integration is also very important since efficiency, transparency and trust is brought into the system. Regular data maintenance and analytics will give us more insights for bringing in sustainability. Another perspective change which is needed is food inflation, which actually brings food prosperity to the farmer. In some of the parts of the country the average returns to the farmer are almost 50% of the selling price of milk is negatively impacting the milk industry, which needs to be increased to bring prosperity to the farmer.

After a wonderful roadmap given by Dr. R.S. Sodhi, the Souvenir of the conference was released by the dignitaries, which carried articles and abstracts of the sessions of the speakers and abstracts of poster presentations by the college students.

Chief Guest Dr. N.V. Patil, Hon'ble Vice Chancellor, MAFSU, Nagpur gave us a roadmap of how this industry and academia interface is very important for both and also to the students, who are our future professionals. He invited IDA to conduct similar seminar at Nagpur and other places. He mentioned that the productivity of the animals can be increased by adopting technical advancements in the dairy field. We blame animals for not being productive, but what we forget that the animals also need love and care which gets ignored in the day to day race. He mentioned that taking care of the animal is important, along with taking precautions and care in health, environment and efficiency of utilization of

nutrients, kind and quality of feed & fodder of the animals. The challenges of small herd vs large herd and unavailability of records in our system, can be managed by utilization of our traditional knowledge and earlier systems of cattle management through modern mechanisms of implementation. The organized sector will bring the best of quality products to the consumer and thus the professionals have to play an important role in the value chain.

In his Presidential address, **Dr. P.G. Patil**, Hon'ble Vice Chancellor, MPKV, Rahuri welcomed all once again and was very happy that such conference is being organized by IDA for the first time in their campus. He said that Dairy industry is an ATM machine for the farmer and thus it needs to be treated with due respect and care. We can provide utmost care and facilities to the farmer by bringing in modern methods of dairy farming, for example the milking machine can also be considered as robot. Technological advancements can be very useful and bring in further efficiency in the system. He reminded us of how Dr. Kurien shaped up the dairy industry and it is now our duty to take it further on the path to progress.

Guest of Honour Prof. M.C. Varshneya, Former Hon'ble Vice Chancellor of AAU and Kamdhenu University Gandhinagar gave an up-to-date presentation on "Dairy Sector in India- Saviour of Rural Economy." He shared with us the statistics of the dairy industry and how the major share of the female cattle is owned by the small and marginal farmers. India is taking care of its cattle as can be seen in the world's largest cattle vaccination program executed by the Animal Husbandry department.

Some recommendations presented by him are:- 1. Quality of milk and milk products have to be maintained at the highest level; 2. Adulteration in milk should be considered as a cognizable offence; 3. Payment of milk should be made by UPI immediately; 4. To encourage Indigenous milk products exported, it should be given subsidy on advertising; 5. To stop loitering of animals on roads in cities and villages Gaushala should be supported/started in each city and villages preferably on earmarked grazing lands; 6. Seed of fodder crops and water for grazing lands should be provided by Gram panchayat free of cost; and 7. All villages having animal population of > 1000 should have a veterinary hospital.

Shri Amit M. Vyas, MD, Amul Dairy, Anand presented a power packed Keynote speech: on Digitization is must for "Smart & Sustainable Dairy Farming". He shared about the dismal state of affairs of the Indian dairy industry in the 1940s. The architects of Amul -Sardar Patel, sowed the spirit of cooperative institution, Morarji Desai was the guiding spirit, Tribhuvandas Patel was the social reformist and founder of Amul, Dr. V. Kurien, father of White Revolution and Shri Lal Bahadur Shastri,

former Prime Minister who envisioned White Revolution. brought about a revolution in the industry by conceiving and implementing the Anand Pattern. The Digitally integrated supply chain of Amul dairy makes it possible to handle massively large volumes of milk and 47 units across 13 states with 84 lakh litres of handling capacity. Smart Dairy farming is utilization of new technological advancements to bring about an innovation to make the traditional dairy farms modern. Digital cow monitoring system, call centre for animal health, rapid diagnostic kits, sex sorted semen, embryo transfer technology, TMR station, fan and fogger, agri machineries, animal health management through ethno veterinary care make the dairy farming at Amul an example of smart and sustainable dairy farming. Sustainability is given utmost importance through clean energy production at Dairy farms, carbon credit trading through bio gas, refractive roof coating system, use of solar power, rainwater harvesting, regenerative agriculture, tree plantation drive, automatic milk sampling, route optimization, use of bio-fertilizer, use of drones in application of bio-fertilizers. Implementation of all new technological advances can be seen at Amul Dairy and thus Amul becomes the most progressive dairy not only in the country but also in the world.

The inaugural session concluded by Vote of Thanks by Dr. D.H. Kankhare, Organizing Secretary.

The conference had Six Technical Sessions on different themes like productivity enhancement, innovations, support to dairying, quality of milk, sustainability and had young scientist presentation too, where in a total of 27 talks by experts were delivered. There were total 87 posters showing innovative work by students and faculty were received and they were presented in 2 sessions. The exhibition has stall by our sponsors as well as experiential learning centres of the university. Students at their dairy centre, served softy and instant ice cream free of charge for both the days. The bakery products, horticulture-floriculture, and bioenergy stalls of the university were the centre of attraction.

The technical tour to Indigenous cattle research cum training centre (ICRTC) was organized for the delegates on 5th evening. Arrangement for demonstration of various unit functions was arranged. It was joyful to experience the scientific management of dairy farm, manure management, fodder and feed management and experimental dairy managed by students.

Evening was made relaxed and pleasant cultural program presented by the staff and students of Agriculture College. It was presented by Swa-kiran Sangitik Rangmanch, directed by Shri P. T. Jagdale and Miss. Kiran Sawant. Some of the delegates also exhibited their talent. Delegates also relished traditional foods.



The Valedictory function was chaired by Dr. S.D. Masalkar, Associate Dean of Agriculture College, while Shri Sekhar Gaikwad (IAS), ADG of Yashwantrao Chavan Academy of Development Administration and Ex-commissioner of sugar remained present as the Chief Guest. All the rapporteurs presented summary of their sessions along with key takeaways. The prizes for the Poster presentations and the Young Scientist award were distributed to the winners.



In the first Session of poster presentation on Milk Processing the winners were Dr. D.D. Patange RCSM, College of Agriculture, Kolhapur, Dr. K.D. More, K.K. Wagh, College of Agriculture, Nashik and Shri S.R. Sonwane College of Agriculture, Latur. In the 2nd Session of poster presentation Animal Husbandry the winners were Dr. T.R. Bhosale, College of Agriculture, Muktainagar, Dr. C.S. Patil, LUVAS, Hisar, Haryana and Dr. S.B. Bhalerao, College of Agriculture, Pune. Young Scientist Award winners were Dr Ankit Mangotra and Dr. C. S. Patil, both from LUVAS, Hisar, Haryana.

Dr. P.T. Dhole, Ex-Director of Research of MPKV shared his thoughts on the seminar that it was a great opportunity for the college of Agriculture and IDA to come together. The feedback was taken from the audience and participants about the seminar; to which they said that it was a wonderful seminar and a great opportunity to learn and interact. Dr. S.D. Masalkar, Associate Dean of MPKV Rahuri, shared his thoughts and happiness over the successful completion of the



seminar. Dr. J.B. Prajapati gave his closing remarks talking about technical and management issues discussed and draw recommendations for policy makers. He conveyed his gratitude to entire IDA (WZ) team and dedicated staff and students of Agriculture College, who

made the conference a grand success. He especially thanked Hon Vice Chancellor, Associate Dean and Organizing Secretary of the event for their tireless efforts. Vote of thanks was presented by Dr. Dhiraj Kankhare.

A Seminar on Unlocking Bovine Potential: Sex Sorted Semen and Embryo Transfer

The eventful morning of December 16, 2023 witnessed the grand unveiling of Seminar at Sardar Patel Assembly Hall, AMUL Dairy, Anand on a very pertinent topic "Unlocking Bovine Potential: Sex Sorted Semen and Embryo Transfer" under the aegis of Indian Dairy Association (Gujarat State Chapter) and Amul Dairy, Anand.

Seeking blessings from almighty, invoking the benedictions of knowledge, the phenomenal event was inaugurated by lighting of the ceremonial lamp by honourable dignitaries on the dais, Chief Guest Dr. Meenesh Shah, Chairman, NDDB; Shri. Vipulbhai Patel, Chairman, Amul

Dairy, Anand; Dr. R.S. Sodhi, President-IDA; Shri Amit Vyas, Managing Director, Amul Dairy, Anand and Chairman, IDA, Gujarat State Chapter; and Dr. J.B. Prajapati, Chairman, IDA (West Zone).

Dr. Gopal Shukla, Manager (AH-Projects), Amul dairy, Anand and organising secretary of the event heartedly welcomed all the dignitaries gracing the event, invited guests, the veterinarians, distributors as well as industry partners from veterinary and dairy fraternity.

Shri Vipulbhai Patel, Chairman, Amul Dairy, Anand expressed great pleasure in welcoming all the learned gathering to the event at the venue for fruitful deliberations and in his address elaborated on the topic "Role of Dairy Cooperative in milk production enhancement programme."



Dr. Meenesh Shah, Chairman, NDDB graced the event as Chief Guest. He enlightened the gathering by narrating "Overview of advancement in Bovine Reproductive Biotechnology - India Perspective". He stressed on the importance of the selected topic of the seminar emphasizing two striking reasons: (1) Even though India is world number one in milk production, the international view is that per animal milk productivity is less - A challenge to overcome. The said purpose entitles urgent need for structured programme with support from Veterinarians and Government aid for providing service to farmers for IVF and embryo transfer technologies. (2) Diminishing number of farmers aspiring for dairy business as profession - the future challenge for India, which is at present prevailing in most of the developed countries.

Dr. R.S. Sodhi, President-IDA expressed happiness and enthusiasm in his address recounting "Milk production scenario in India - Current and future trends". He equated the technologies of sex sorted semen and embryo transfer with that of milk production, processing and packaging for preservation as well as proper logistics for distribution to rural areas. According to him, the challenges that remains to overcome are shortage of manpower, checking adulteration to retain consumer faith and decrease in milk productivity costs.

Shri Amit Vyas, Managing Director, Amul Dairy gave Keynote address on the topic "Amul Case Study - Different Strategies for Productivity Enhancement in Dairy Animals".

In his address, he admired the Amul model conceptualized and implemented under the great leadership of visionary Dr. Verghese Kurien and Shri Tribhuvandas Patel, which the world is keen to replicate. He embarked on the journey of Amul that started its first sex sorted semen laboratory in December, 2021. The success rate for such advancements depends on tyingup with major technology providers, continuous training for capacity building, periodic review through data collection and investing efforts in the right directions. Amul being the first dairy in India to provide the sex sorted semen as well as embryo transfer technologies to farmers at subsidized rates, he cited examples for the success and continuous progress achieved by them in gaining trust of farmers and fuelling quality milk production.

Dr. J.B. Prajapati, Chairman, IDA (West Zone) presented concluding remarks and thanked one and all for being part of the grand event. He acknowledged the support from Amul Dairy, Anand for organizing the seminar on such an important theme. He anticipated resourceful deliberations in the industry sessions and gainful conclusions for the industry to follow.

The technical sessions with presentations from the ten eminent speakers from the industry dwelled on increased milk productivity with quality improvement and reduced production cost by application of advanced artificial insemination technologies and feed management for the animals.

Dr. Rahul Gupta, Head of Operations, ABS India discussed the importance of sexed semen relating to the seminar theme "Unlocking Bovine Potential: Sex Sorted Semen and Embryo Transfer". He talked about National Action Plan for Rashtriya Gokul Mission and Accelerated Breed Improvement Program (largest program in Livestock sector) sponsored by GOI.



Dr. Amol Kinhekar, Sr. Lab Manager, ST Genetics, India discussed the principle behind semen sex sorting technology and the status of the technology in India and globally. He talked about measurement techniques for the success rate of the technology by QC results & purity of desired gender (Lab based), conception rate (field result) and gender ratio of the calves born (field result).

Shri Sandeep Singh, CEO, Godrej Cattle Genetics with his deliberation on "Livestock Genetics for Yield Improvement" narrated how animal husbandry has outpaced agricultural growth in India over last two decades with dairy being the biggest success story. He delved with urgent need for improvement in genetic potential for further yield improvement in Indian milch animals, embryo transfer technology being the solution for the same.

Dr. Sanjay Gorani, General Manager (Animal Breeding), NDDB summarized "NDDB initiatives in the field of Bovine IVF technology: our journey so far". He described animal breeding as a blend of Genetics and Reproduction and discussed resourceful development activities carried out by NDDB with support from GOI in establishing laboratories and promoting field ET programmes.

Dr. Srinivas Karnati, IIL, Hyderabad dwelt upon a very important topic on 'Preventive aspects and innovation unleashing bovine power'. He narrated importance of use of combined vaccines, preventing Theileriosis and gut health in calf and deworming. He highlighted the role of Raksha Biovac and Acticalf-The 1st month enteric care. He also suggested to use oxfenvet, vetfen-B and vetfen-T for efficient deworming.

Dr. Abhishek Garg, Associate Director - Ruminant discussed Precision in dairy management with "SenseHub Cow Monitoring Technology". He talked about optimization of dairy economy with focus on Production, Reproduction and Health, which requires

continuous monitoring of animals by use of technology.

The topic of "Technological Intervention for Success of SSD and ET" was intercepted by **Dr. Vishal Vashisht**, Business Head, Delaval. He narrated the key challenges for dairy farmers and with changing trends; digital and smart farming would be the future of dairy farms in India. Feeding is till date considered as one of the important factors affecting milk productivity and quality at farm level and hence according to him TMR feeding center would allow conversion of traditional to system driven feeding with feeding robots doing the task of human.

Dr. Sanjay R. Nikam, General Manager-Dairy (India & Nepal) discussed "The role of minerals in bovine reproduction". He illustrated the broad role of trace minerals throughout the reproductive process; mostly an indirect effect e.g. normally trace minerals act as cofactors in enzymes or vitamins involved in the reproductive process e.g. Cobalt and Vitamin B12.

"Technological advancement in the field of Bovine Artificial Insemination" was narrated by **Shri Divyesh Butala** from Prompt. He talked about Prompt as a pioneer in providing cutting-edge dairy tech solutions from farm management and milk collection to quality analysis and preservation incorporating innovations in every step.

Dr. Sudhir Kumar Singh, General Manager-Kemin Industries South Asia elaborated on solutions for "Precision Nutrition of Dairy Animals" by precise ration formulation (Feed & TMR), feed additives and feed processing techniques. He discussed the challenges in animal feeding to increased raw material cost and discussed profit making by feed efficiency through (1) Improving Productivity & maximize components yield (2) Increasing Lactation number and (3) Enhancing Reproduction along with reduction in methane emission per unit.

IDA Western UP Local Chapter organises Seminar

Indian Dairy Association (Western UP Local Chapter), in collaboration with Central Institute for Research on

Cattle (CIRC), Meerut organised a one day seminar at CIRC Campus, Meerut on December 27, 2023. The theme of the Seminar was "Strategies for Accelerating Dairy Entrepreneurship in Wester Uttar Pradesh". The Seminar was attended by more than 150 participants including 80 farmers apart from professional from Dairy industry and ICAR.

Dr. T. Mohapatra, Former Director General (ICAR) and Chairperson, PPVFRA graced the occasion as the esteemed Chief Guest. Dr. A.K. Misra, Former Chairperson (ASRB) & Ex-VC, MAFSU was the Guest of Honour. IDA (North Zone) and CEC, IDA was represented by Dr. I.K. Narang, Hon Secretary, IDA (NZ) and Shri Hariom Gulati, Secretary General-IDA.

The seminar began with the welcome address by Dr. A.K. Mohanty, Director ICAR-CIRC, Meerut followed by an address by Dr. A.K. Tripathi, Chairman, IDA Western UP Local Chapter. While addressing the audience **Dr. T. Mohapatra** emphasised on the need for proper management of dairy cattle and timely and scientific processing of milk and milk products so as to bring down cost of production and make the Indian dairy products competitive in the market. Dr. Mohapatra also explained various government schemes for Cow and Cow based agriculture and encouraged farmers to adopt these practices and take full advantage of the Schemes.

Dr. A.K. Misra in his address appreciated the role of farmers in making India self-sufficient in milk and transform the country from net importer to net exporter in a matter of a few decades. Dr. Misra exhorted the farmers to become entrepreneurs and take full advantage of the opportunities available in the fast growing domestic and international market.

The first Technical Session Chaired by Dr. Narang. The session was kick-started by Dr. G.S. Rajorhia, former President-IDA with an engrossing and thought provoking lecture on challenges and opportunities of dairy development in Western UP. He pointed out that while UP State contributed 18% of total milk production in the country, more than 50% of this comes from the 30 districts of Western UP making it the milk bowl of the Region. Dr. Rajorhia pointed out that Western UP is bestowed with rich soils, adequate irrigation resources, diverse crop



cultivation, adaptable and soothing environmental conditions and hard-working peasantry which have contributed to sustained and rapid growth of dairying. With rapid growth in demand for milk across the country, it will be beneficial for the famers to enter into commercial dairy farming to harvest higher profits. This would necessitate installation of automatic milking machines, weighment and testing systems and bulk milk chillers at farms. He also stressed upon training of women and unemployed youth in modern dairy farming.

Second lecture in the session was delivered by **Dr. G.K. Gaur**, ADG (APB), ICAR, Delhi on Animal Breeding. Dr. Gaur depicted that the average yield of Indian milch animals is much less as compared to USA, Europe and Australia. Hence, there is still a lot of scope to improve the genetic material of Indian cows and buffaloes to increase their productivity. He stressed on rearing of good quality bulls for semen production as Sire index plays a major role in improvement of milk yield in the offspring. He informed the farmers that nowadays Sex Sorted Semen is available which can be used to breed female calves. Dr. Gaur also emphasised that there is a need to bring out a suitable breeding policy to ensure that better breeds are developed for higher milk yield with disease resistance.

Dr. S.K. Verma, Principal Scientist, ICAR-CIRC, Meerut made an elaborate presentation on Scientific feeding of different categories of livestock for better productivity and entrepreneurial opportunities in feed and fodder sector. Dr. Verma shared a user friendly Excel based model for working out balanced ration specific to an animal. While detailing about the feed requirement of various types of animals he advised to use cheaper nutrients available in traditional fodder and supplement it with protein and minerals available in legumes so as to derive best and economically feasible results. Dr. Verma also stressed that farmers must adopt silage making practice so that during off season, animals are fed quality fodder.

Second session mainly focussed on experience sharing by progressive farmers. In this session, Shri Aseem Singh Rawat, of Hetha Organics LLP and Mrs. Milan Sharma, Renvar Farms, Village Patva, Selakhade shared their journey of setting up profitable dairy businesses and encouraged the gathering to take up commercial dairy farming and adopt scientific methods. The session generated a lot of interest with both the entrepreneurs showing their willingness to provide help and guidance to the willing farmers in setting up their farms.

Dr. Raja Rathinam, Former CEC Member-IDA also attended the seminar. Shri T.T. Reddy, Secretary, IDA Western UP Local Chapter delivered the vote of thanks and the session was concluded with a promise to organise more such events in collaboration with ICAR.

During the Seminar an Exhibition with 24 stalls related to Dairy Business was also set up which was a major centre of attraction for the farmers' guests.

Workshop on "JASP Software for Data Analysis"

Indian Dairy Association (Kerala State Chapter) jointly organized a one day Workshop on December 2, 2023 on "JASP Software for Data Analysis" in association with Department of Dairy Business Management and Computer Club, and AFSTI-Thrissur Chapter at VKIDFT, Mannuthy.

Prof.(Dr.) A.K Beena, Convener; Dr. Dinker Singh, Co-convener; Ms. Bincy T. J., Programme Coordinator; Ms. Janice E.J., Assistant Coordinator and Ms. Kesiya Eliza Giji, Member were the members of the organizing committee.

The workshop was planned with an objective of familiarizing participants with the JASP software, its interface, and basic functionalities. 46 participants were registered for the programme out of which 45 participated in the workshop. Following the registration, inauguration function was started in the seminar hall of VKIDFT, Mannuthy. The Co-convener Dr. Dinker Singh, welcomed the respective guests and participants to the workshop.

Presidential address was given by Prof.(Dr.) A.K.



Beena, Associate Dean, VKIDFT. Chief Guest of the programme, Prof. (Dr.) M. R. Saseendranath, Hon'ble Vice Chancellor, KVASU, officially inaugurated the function. Prof. (Dr.) P. Sudheer Babu, Registrar, KVASU; Dr. Gleeja V. L., Associate Professor, Dept. of Statistics, CoVAS, Mannuthy and Dr. Mohanlal E.K., Assistant Librarian and Head, KVASU Library and Information System felicitated the function. Ms. Bincy T. J., Programme coordinator extended vote of thanks to everyone present. Dr. Rasin R.S., Assistant Professor, St. Thomas College, Thrissur was the Resource Person.

The first session was on the Basic Statistics. The second session focussed on the introductory session on JASP Software. In the afternoon session, the participants were given a practical session on the software. The Valedictory function was held at Seminar hall, VKIDFT, Mannuthy.

IDA Gujarat State Chapter Office Renovated

IDA (Gujarat State Chapter) was established in 1998 with the blessings of Dr. V. Kurien. An office was allotted by the then Gujarat Agricultural University at SMC College of Dairy Science for IDA Chapter. Since then the Chapter is actively working from the same office.

On January 20, 2024, the formal inauguration of the renovated office was done in the presence of Dr. J.B. Prajapati, Chairman, IDA (WZ); Shri Amit Vyas, Chairman, Gujarat State Chapter and other SEC members.

Founder office bearers of the Chapter Dr. P.N. Thakar, Dr. H.K. Desai and Dr. P.S. Prajapati also graced the occasion along with faculty members of the college. The





renovated office has a conference room, pantry, chairman's office and secretarial cabins. The inauguration function was followed by SEC meeting.

NATIONAL News

Shri Amit Shah Laid the Foundation Stone for the NCDFI Office Complex and Conferred Awards to Member Cooperatives



On December 30, 2023, Shri Amit Shah, Hon'ble Union Minister of Cooperation and Home Affairs, virtually laid the foundation stone for the office complex of the National Cooperative Dairy Federation of India Ltd. (NCDFI) in Anand. Serving as the Chief Guest at the event, Shri Amit Shah also conferred the NCDFI eMarket Awards for 2022-23 to 37 winners hailing from 25 Indian states and Union Territories. The ceremony, inclusive of the foundation stone laying and award presentation, took place at the National Forensic Science University (NFSU) campus in Gandhinagar.



In recognition of the endeavours of dairy cooperative stakeholders engaged in selling and purchasing of various dairy and agricultural products through the eMarket platform, the NCDFI eMarket Awards were a pivotal aspect of the ceremony. Hon'ble Minister bestowed the awards upon organisations representing 37 winners from different states across India. Key figures in the farming community, including Chairman/Directors and Chief Executives, accepted these prestigious accolades.

During the Keynote address, Shri Amit Shah, said, "Hon'ble Prime Minister, Shri Narendra Modi brought about the digital revolution in India. Every G20 delegate who came to India was in awe of the extent of digital transactions taking place here. India is among the fastestgrowing digital economies in the world. I urge the NCDFI members to move 100% towards e-business." He additionally mentioned that the initiative has commenced with a limited-scale pilot project, wherein Rupay debit cards have been distributed to every farmer in select districts of Gujarat. Subsequently, the funds from each farmer's account are being transferred to a cooperative bank, and the corresponding milk payments are being deposited into their bank accounts. If this model is implemented across the country, it will bring about a huge change to further accelerate India's digital economy.

The Hon'ble Minister also emphasised on cooperation among various cooperative institutions. "Cooperation among cooperatives is important for the progress of the cooperative sector. APMC accounts will also soon be in cooperative banks. If every farmer works via a cooperative bank, it will give a major boost to online transactions. Cooperatives must support other cooperatives," the honourable minister further went on to say.

Hon'ble Minister urged NCDFI and NDDB to actively promote natural and organic farming. He emphasised the significance of educating farmers about these practices and developing viable implementation models that do not adversely affect farmers' incomes.

The strategic selection of Anand, renowned as the Milk Capital of India and the birthplace of the White Revolution, underscores NCDFI's commitment to establishing its office. The new office complex, situated in Vaghasi village near Anand, spans 7,099 sq. mt. of land, with a total built-up area of 4,674 sq. mt. NDDB will spearhead the construction on a turn-key basis, marking a significant shift from rented space to a self-owned structure for NCDFI. The four-story building, featuring a Stilt basement + G + 2 Floors configuration, will incorporate a solar power plant, aligning with environmental sustainability goals. The complex is anticipated to be operational within a year.

Notable dignitaries present at the ceremony included the Hon'ble Chief Minister of Gujarat, Shri Bhupendra Patel; the Speaker of the Gujarat Legislative Assembly, Shri Shankar Chaudhary; Shri Dileep Sanghani, President of NCUI and Chairman of IFFCO; Dr. Meenesh Shah, Chairman of NDDB and IRMA; and Dr. Mangal Jit Rai, Chairman of NCDFI.

The Hon'ble CM of Gujarat, Shri Bhupendra Patel, said, "The cooperative sector of India got a new direction from our Hon'ble PM Shri Narendra Modi. Agriculture and animal husbandry are key sectors that drive the growth of the Indian economy. NCDFI's efforts have been empowering several cooperatives by modernising their operations. Production by the mass must the new identity to the dairy and cooperative sector. These sectors will certainly play a key role in making India a developed nation by 2047."

During the ceremony, the Hon'ble Minister, Shri Amit Shah, launched a coffee table book that provides a concise narrative of NCDFI, outlining its journey, highlighting milestones, and showcasing various activities.

Dr. Meenesh Shah, Chairman, NDDB, said, "I assure you all that by next December, the new building of NCDFI will be operationalized. The dairy sector has provided 8 crore families with livelihood. Cooperative is indeed a wonderful tool for empowering women and providing livelihoods. Today, 80% of earnings from milk production is given to farmers. We have developed the Amul Model or Anand Model, which will soon be extrapolated to the global scale as Dairy to the World. NDDB is actively working towards dairy development in several areas where it is not developed yet such as Assam, Ladakh, etc."

Dr. Mangaljit Rai, Chairman of NCDFI, said, "We are fortunate to be starting our NCDFI new office in Anand, which is the birthplace of Sardar Vallabhbhai Patel. We hope that the new office will enable several cooperatives to grow successfully and scale up, and we can play a role in bringing about transparency in the cooperative sector. Our bigger goal is in line with the Hon'ble PM, Shri Narendra Modi's dream at 'Sahkarita se Samriddhi', i.e. Development through Cooperatives. We are grateful to the Hon'ble Minister of Cooperation, Shri Amit Shah, for supporting us in achieving our goals."

The NCDFI e-Market Awards for 2022-23 recognised top performers on the platform, with Nandini (Karnataka), Mother Dairy (Delhi), and Aavin (Tamil Nadu) securing the top three positions based on transacted business. NDDB received an Appreciation Award for continued guidance and patronage to NCDFI and its member dairy cooperatives. Additionally, dairy cooperatives such as Amul (GCMMF), Kaira Milk Union, Sabarkantha Milk Union, Valsad Milk Union, Maahi Milk Producers' Company, and Vidya Dairy from Gujarat received e-Market Awards. Various other dairy cooperatives from states such as Andaman and Nicobar, Assam, Bihar, Kerala, Madhya Pradesh, Maharashtra, Puducherry, Rajasthan, and Sikkim, among others, were also honoured during the ceremony.

The occasion witnessed extensive participation from leaders of dairy cooperatives throughout India, representatives from national cooperative dairy federations, other national-level cooperative federations, farmers, and government officials.

Established in December 1970, the National Cooperative Dairy Federation of India (NCDFI) serves as the apex organization for the cooperative dairy sector, operating under the Multi-State Cooperative Society Act. NCDFI's membership comprises federal dairy

cooperatives from various Indian states and union territories, currently totaling 19 regular members, 13 associate members, and the National Dairy Development Board (NDDB) as an institutional member.

NCDFI's primary objective is to facilitate the functioning of dairy cooperatives through coordination, networking, and advocacy.

During the foundation stone laying ceremony for the NCDFI office building and the presentation of the NCDFI eMarket awards, Shri Srinivas Sajja, Managing Director of NCDFI, expressed gratitude in the vote of thanks.

NDRI Commercialized Nine Technologies for the Rapid Detection of Adulteration in Milk to a Dairy Conglomerate



National Dairy Research Institute (NDRI) has commercialized Nine technologies related to rapid detection of adulteration in milk to Hatsun Agro Products Ltd., a Chennai based leading dairy industry of South India. Speaking on this occasion, Dr. Dheer Singh, Director, NDRI has said that institute is making concerted efforts to commercialize technologies to various stakeholders developed by its scientists and today's license agreement is a step towards in this direction. He further said that these technologies are related to paper strip based tests for rapid detection of neutralizers, urea, hydrogen peroxide, glucose, sucrose, maltodextrin, formaldehyde and salt in milk. In addition, a rapid test for detection of presence of detergent in milk has also been commercialized to Hatsun Agro Products Ltd. He said these technologies have been developed in a multidisciplinary approach by the scientists of Dairy Chemistry and Animal Biochemistry Division at the Institute. The institute has also obtained Patents for these technologies. He informed that apart from rapidity, detection limit of these tests is better than conventional tests and all the tests can be performed on a milk sample within 10 minutes. Even some of the test results can provide results instantaneously. Dr. Rajan Sharma, Joint Director (Research) & Co-inventor said that the developed tests

can be used at milk receiving stations and thus will help the dairy industry in segregating good quality milk from bad quality milk at its point of origin. Importantly, they are user-friendly and do not necessitate specialized equipment, allowing even non-technical personnel to perform them.

Mr. Shanmuga Priyan, Chief Operating Officer (COO) of Hatsun Agro Products Ltd., Chennai said that the company is currently manufacturing and marketing products like, milk, curd, ice creams, dairy whitener, skimmed milk powder, ghee, paneer etc and its brands include Arun, Arokya, Hatsun and HAP, Ibaco etc. The company is handling more than 40 lakh liter of milk per day in around 19 dairy plants spread across Tamilnadu, Karnatka, Maharashtra and Telengana. The company has marketing network in more than 11 states across India and has presence in overseas market. In the year 2023-24, the turn-over the company was more than Rs. 8000 crores. He said that these technologies for the rapid detection of adulteration of milk will help the company to ensure its consumers clean, safe and adulteration free milk.

National Seminar and Alumni Convention Organized at SMC College, Anand

A National Seminar on the theme "Celebrating 75 Years of Dairy Excellence- Reflections and Future Directions" and 14th Alumni Convention were organised jointly by Alumni Association and SMC College of Dairy Science, Anand held during December 1-2, 2023.

Dr. N.H. Kelawala, Hon'ble Vice Chancellor, Kamdhenu University (KU), Gandhinagar presided over the function. While Shri Jayen Mehta, Managing Director, GCMMF Ltd., Anand was the Chief Guest, the Guests of Honour of the function were Dr. D.B. Patil, Director of Research and Dean PG Studies, KU, Gandhinagar and Shri Arun

Purohit, Managing Director, Sumul Dairy, Surat.

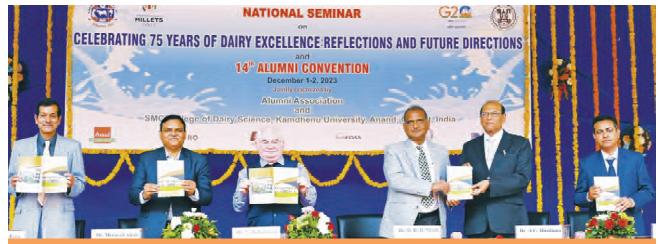
Dr. A.H. Jana, Principal, SMC College of Dairy Science, Anand in his welcome address briefed about the academic, research and extension activities of College. Dr. A.G. Bhadania, President, Alumni Association gave his opening remarks.

Shri Jayen Mehta spoke on some glimpses related to the growth of Indian dairy sector i.e. from a milk deficient nation to the largest milk producer in the world. He highlighted the importance of milk protein and its potential for enriching dairy and other food products for providing superior nutrition to the consumers at an affordable price. Dr. Patil expressed his concern on issues related to adulteration of milk and milk products and stressed on the need for more research in this area at multi-institutional level. Shri Purohit deliberated on the various challenges that needs to be tackled and the opportunities the dairy sector has to tap in the near future.

More than 400 delegates, both from India and abroad, attended the National Seminar. Scientists and students showcased their research findings through poster presentation. A Souvenir containing the technical articles, research abstracts and advertisement from sponsors was released during the inaugural program.

The seminar had a Technical session and Industry forum, with eminent speakers from dairy industry and academia. The speakers of Technical session were Shri Sameer Saxena, Head (QA & NPD), GCMMF Ltd.; Shri Aditya Jain, Senior Manager, Products and Process Development, NDDB, Anand; Dr. Kaushal Kothari, Managing Director, Adare Food Ingredients Pvt. Ltd., India and Dr. Subrota Hati, Assistant Professor, Dairy Microbiology Department, SMC College of Dairy Science, Anand.

The speakers of Industry Forum were Shri Shyam Bhatnagar, Director, ABC Process Solutions; Shri Ranganath Seetharam Cofounder and Chief Customer Officer, Mojro Technologies Pvt. Ltd.; Mr. Aniruddha



Pisal, Senior Product Manager, IndiFoss; Dr. Sanket Borad, Director, Flavi Dairy Solutions, Ahmedabad and Dr. Ahesan Shaikh, Associate Professor, Dairy Chemistry Department, SMC College of Dairy Science, Anand.

The Valedictory function of National Seminar encompassing 'Prize distribution ceremony' for Poster Presentation was held

in the afternoon session. The Chief Guest of the function, Dr. K.B. Kathiria, Hon'ble Vice Chancellor, Anand Agricultural University, Anand briefed about the various technological advancements that had taken place in the field of animal husbandry in order to enhance milk productivity and also in the dairy industry to ensure providing quality milk and value-added dairy products to the consumers. The Guest of Honour, Shri H.R. Dave, Ex-Deputy Managing Director, NABARD emphasized on the importance of 'Clean milk production' and the need to make dairying sustainable and environment friendly. Shri Rajkumar Malik, Executive Director, IDMC, VVNagar also the Guest of honour of the function spoke on growth opportunities for dairy industry and how advanced technology and engineering innovations are going to expand the dairy processing facilities and products marketing.

14th Alumni Convention

Dr. Meenesh Shah, Chairman, NDDB, Anand was the Chief Guest of 14th Alumni Convention of SMC College of Dairy Science Anand. Dr. R.R.B. Singh, Hon'ble Vice Chancellor, Dau Shri Vasudev Chandrakar Kamdhenu Vishwavidyalaya, Chhattisgarh was the Guest of honour.

Addressing the august gathering, Dr. Shah highlighted the recent strides that NDDB and Indian dairy sector has undertaken towards making the dairy sector more efficient, effective as well as sustainable to ensure better livelihoods to our farmers and ensuring supply of quality milk and milk products to the consumers. He emphasized the role played by NDDB with the network of dairy cooperatives towards improving productivity, disease control, end-to-end traceability, digitalisation, etc. to make India - 'Dairy to the World'.

Dr. R.R.B. Singh in his address opined that Alumni Convention provided a platform for interaction and exchange of ideas and knowledge by the Alumni for the betterment of the Institute as well as to make the current students aware of the entrepreneurship or even ample job opportunities they have at their discretion.



During the event, Dr. Shah and Dr. Singh, both alumni of SMC College of Dairy Science, Anand were felicitated by the Alumni Association for their distinguished position as well as for their outstanding contributions to the dairy sector/dairy education.

Dr. N.H. Kelawala, Hon'ble Vice Chancellor, KU, Gandhinagar in his presidential address remarked that the transformative growth of dairy sector had contributed to an increment in India's GDP and has boosted socioeconomic development of the country. He also stressed on the need for sustainable dairy farming practices and product diversification.

On the eve of Alumni Convention, the Graduates and Post graduates of 1995, 1996 and 1997 batches were honoured by their Alma mater taking into cognizance their 25 years of fruitful contribution to the Dairy fraternity/other organizations, and to the Society at large. A 'Career Profile' booklet of the alumni of such batches as well as one 'Placement Brochure' of the outgoing batches of under graduate and post graduate students of the College, including MBA (Dairy and Food Business) students (2023-24) were released at this occasion.

Dr. J.R. Patel Memorial Award for Education and Research category were conferred to Dr. K.D. Aparnathi, former Professor and Head, Dairy Chemistry Department, Dairy Science College, Anand and to Dr. J.B. Prajapati, Chairman, IDA (WZ) and former Principal & Dean, Dairy Science College, Anand for the year 2019 and 2020, respectively. Dr. J.R. Patel Memorial Award for Dairy/Food Professionals for aforementioned respective years were presented to Shri Deepakkumar Ratilal Shah, Managing Director, Vidya Dairy, Anand and Shri Prateek Kumar, Chief General Manager, Dudhmansagar Dairy, Manesar.

The Alumni Association 'Best Student Award' for B.Tech. (Dairy Technology) programme for the academic years 2019, 2020, 2021 and 2012 were awarded to Shri Rajendra Mamodia, Shri Yash A. Rupala, Ms. Dave Ritu Gaurang and Shri Pranavkumar Padhiyar respectively.

Dr. Sreeja V., Assistant Professor & Head, Dairy Microbiology Department was the Organizing Secretary of National Seminar while Dr. Chetan Dharaiya, Assistant Professor, Dairy Technology Department, SMC College of Dairy Science, Anand was the Organizing Secretary of 14th Alumni Convention. Shri D.R. Shah, Vice President, Alumni Association and Dr. Ashish D. Patel, Secretary, Alumni Association expressed their gratitude towards all the alumni and delegates.

Life Time Achievement Award for Dr. Raja Rathinam



Dr. Raja Rathinam, Former CEC Member IDA has been honoured with one more Life Time Achievement Award for his contributions towards Productivity and Environmental Enhancement Award in Dairy Sector by Dairy Connect India at Erode on December 23, 2023. Earlier to this, Search Committee consists of Padmashri Prof. (Dr.) G.D. Yadav, National Science Chair, GOI, Chairman MSME, CCII and Dr. P.K. Rajput, MOC of NITI Ayog nominated Dr. Raja Rathinam for one more Life Time Achievement Award for serving MSME Rural Farmers in a Conference held at Vigyan Bhawan, New Delhi in November 2023. He is also the recipient of awards from the Prime Minister of India, Governor of Bihar, Chief Minister of West Bengal and other dignitaries. While accepting the Award, he requested the professionals to join the movement of converting the unorganized sector into an organized sector that too in vulnerable areas in the given situation.

Mother Dairy Launches Pure Buffalo Milk Variant

Mother Dairy announced the launch of its Pure Buffalo Milk variant for consumers. It is being initially launched in the Delhi-NCR region and its



distribution will be further expanded to Maharashtra, Uttar Pradesh and Haryana.

The new variant will be made available in the NCR market within a week, the company added in a statement. "Mother Dairy Buffalo Milk offers 6.5 per cent fat content and 9 per cent SNF, giving it a creamier texture and rich taste profile. The new variant will contain A2 protein. It has been priced at \$70 per litre and will also be available in 500 ml packs.

Shri Manish Bandlish, Managing Director, Mother Dairy, said, "With evolving consumer preference for rich and creamy milk, that is also versatile in terms of its usage beyond plain drinking, Mother Dairy is introducing yet another species-specific Buffalo Milk after the great success of Cow Milk."

The newly introduced Mother Dairy Buffalo Milk will be made available across the company's entire distribution network in a phased manner, including its booth network, general/modern trade, along-with e-commerce/q-commerce platforms. "We are confident that the newly introduced variant will quickly become a household favourite, contributing to the brand's specialty and expertise of providing species-specific milk variants," Shri Bandlish added.

New SPX FLOW Seamless Infusion Vessel Helps Increase Runtime and Yield in UHT Systems

According to a press released received from SPX FLOW, their APV brand has released the Seamless Infusion VesselTM to help UHT (Ultra High Temperature) infusion systems have longer running times, less product waste and more yield. Dairy and beverage producers often struggle with product fouling or build-up during UHT processing. The Seamless Infusion Vessel can help and, in turn, increase efficiency and system performance.

UHT infusion plants process many popular products, including dairy (milk, cream and ice cream), beverages and specialized nutrition foods (liquid meals, protein drinks and infant formula).

Benefits of the Seamless Infusion Vessel

Instead of the traditional clamp connection, the seamless connection links the vessel bottom and pump housing in UHT infusion systems without a sealing gasket and has better water-cooling on the pump casing and impeller. This results in no product buildup and decreased product loss; longer production runs before cleaning; and increased system efficiency and overall sustainability.

INTERNATIONAL News

International Dairy Market: Overview

As per the latest USDA data of mid January, 2024, international market overview are as follows:

EUROPEAN

Western European

Milk production within Western Europe has begun the year with the expected seasonal milk increases. German industry sources report weekly milk production within Germany increased 1.3 percent in the first week of the year compared to the last week of 2023. However, compared to the previous year, week 1 milk production is 1.4 percent lower in Germany and 1.8 percent lower in France. In addition, Germany, the Netherlands and France all reported milk decreases for the months of October and November, 2023 when compared to 2022, suggesting a slowdown of milk output to end the year.

According to CLAL data made available to USDA, November 2023 EU cows' milk delivered to dairies is estimated at 10,924,000 MT, down 2.3 percent compared to last year. Year-to-date EU cows' milk delivered to dairies through November 2023 is estimated at 133,235,000 MT, an increase of 0.1 percent when compared to January-November 2022 EU milk production. Among some of the top Western EU milk producers, the year-to-date milk deliveries and percentage changes from January-November 2022 are Germany, 29,773,000 MT, +1.7 percent; France, 21,444,000 MT, -2.9 percent; and Netherlands, 12,750,000 MT, +1.2 percent. The provisional November 2023 cows' milk delivered to dairies in the UK was 1,197,600 MT, down 2.5 percent from November 2022. Year-to-date cows' milk deliveries in the UK for January-November 2023, 14,059,000 MT, was 0.1 percent more than total milk deliveries in January-November 2022.

Farmers protesting higher taxes and lack of governmental support subsidies created traffic jams and entangled transportation logistics in Germany for the last week. The German government is struggling to find a resolution as it works to balance its federal spending plans.

Eastern European

Preliminary milk production numbers for November 2023 suggest a continuing trend of milk growth in some Eastern European countries and declines in others. According to CLAL data made available to USDA, some of the top

Eastern EU milk producers, the year-to-date milk deliveries and percentage changes from January-November 2022 are Poland, 11,906,000 MT, +1.6 percent; Czech Republic, 2,955,000 MT, +1.5 percent; and Hungary, 1,503,000 MT, -3.8 percent. While monthly milk production in Hungary has been consistently lower each month throughout the year, monthly milk production in Poland and the Czech Republic have been consistently higher each month. Online sources report November milk production in Ukraine at 500,000MT, down from 565,000 MT in November 2022 and down from 625,000 MT in November 2021. The dairy industry in Ukraine has faced continued economic pressures; including loss of productive land, loss of markets, and uncertain processing capacities, since the conflict with Russia began nearly two years ago.

The press service of the State Production and Consumer Services of Ukraine announced that starting January 15, 2024, Ukraine will take steps to better align the certification and facilitation of import, export, and shipments of agricultural products with that of the Euro Commission. By taking these steps, the country hopes to simplify the formal procedures to export and ship agricultural products from the Ukraine into the EU.

Ukraine and its EU neighbors continue to try to find a delicate balance to agricultural trade. Polish farmers and truckers resumed a protest, blocking a border entry point between Poland and Ukraine. The farmers are protesting with the goals of securing government subsidies, preventing tax increases, and the reinstatement of a system that would require Ukrainian companies to obtain permits in order to operate within the EU.

OCEANIA DAIRY MARKET

New Zealand

Recent attacks on shipping vessels in the Red Sea are impacting trade routes and affecting the movement of goods through the Suez Canal as ships are being rerouted around the Cape of Good Hope in South Africa. This is contributing to increased fuel costs and shipping delays and expected to have an impact on food and beverage businesses reliant on the Red Sea for shipping. A New Zealand dairy cooperator commented on these issues, stating they are currently working with carriers to mitigate issues and anticipate increased transit times of around 2 weeks, though the complete impacts are yet to be seen.

Australia

Export data for Australia from November of 2023 was recently released, showing milk equivalent exports in the month increased by 16.9 percent compared to November 2022. Industry sources indicate this was

higher than anticipated for the month, and exports to Southeast Asia were higher than in November a year ago. Total export quantities of butter, skim milk powder, fluid milk, whey, and lactose were higher in November 2023 than a year earlier. In the 12-month period ending in November, lactose and whey exports increased, while exports of the other mentioned commodities, along with WMP, declined.

SOUTH AMERICA DAIRY MARKET

Brazil's CONAB and USDA's WASDE lowered estimates for Brazilian soybean and second crop corn yields due to inclement weather brought on by the El Nino phenomenon. In some areas, excessive rain delayed or halted growth, while in other areas heat and dryness played that role.

Paraguay and Argentina saw increased corn estimates due to beneficial and much needed rainfall in the spring. That said, contacts in the Southern Cone say milk output is only expected to trend lower in the warming summer months. Milk checks vary from country to country, but operational costs, namely feed prices, have steadily increased throughout the entire continent.

An Algerian tender bolstered milk powder markets in the region early in the year. Whole milk powder and skim milk powder prices both experienced a bullish push. That said, contacts are showing concerns about mid-to longer-term price trends, as Brazil continues to build up its own dairy production/processing capacities. Exporter contacts in neighboring countries question how much Brazilian's internal dairy expansion will inhibit potential buying needs. Additionally, contacts are eyeing the Mercosur-European Union potential trade agreements, which some expected to materialize by the end of 2023. At report time, there is not a definitive deadline for the next round of talks.

GDT Prices Index Up 2.3% from the Previous Event

On January 16, 2024, at GDT Event 348 index price went up by 2.3%. Previous Global Dairy Trade Event 347 was held on January 2, 2024.

Whole milk powder has reached an average of US\$3353/MT, with a 1.7 per cent increase.

Skim milk powder - There is a decline of 1.2% percentage in GDT Index Price. Weighted average price \$2638.

There is an increase of 4.3 per cent in Anhydrous Milk Fat GDT Index Price to an average of US\$5842/MT.

Butter is up with 5.8 per cent in GDT Index Price to an average of US\$5906/MT - and cheddar also up with

1.0 per cent to an average of US\$4217/MT. 24,909 MT of product was purchased by 167 successful bidders.

December 2023 Dairy Market Review in Great Britain-AHDB

According to Agriculture and Horticulture Development Board (AHDB) Great Britain (GB) milk deliveries declined less than expected in December, falling back by 0.3%, compared to November's 2.8% year-on-year decline. Production for the milk season to date (April to December) totals 9,272 million litres, slightly behind (-0.5%) the same point in 2022. This is currently running ahead of the latest forecast revision.

Reasons for the less-than-expected decline in December deliveries include annualisation against a snowy December last year, a shift in favour of Autumn block calving and a need for some to drive short-term revenue.

Cow numbers have remained stable, despite increased pressures on farm margins. In October the GB milking herd stood at 1.66 million head, a slight (0.1%) increase on the same month of the previous year. In contrast, young stock (under 2 years) declined by 24,000 head (2.5%) year on year to stand at 926,000 head. The slight increase in the total milking herd was driven by an increase in the number of cows aged 2-4 years. This raises questions over whether GB might see a decline in cow numbers going forwards.

Overall price movements on UK wholesale markets continued to see some steady growth in December. Positive movements were recorded for cream, butter, and mild cheddar, however SMP saw prices ease. Generally, a seasonal uptick in demand and limited product availability are reported to be supporting markets. In December, butter rose by £160/t, cream prices improved by £69/t, mild cheddar up by £110/t, SMP was the exception losing £50/t.

The GDT echoed this positive sentiment and has now improved for the past three consecutive periods.

As of December, milk market values (which is a general estimate on market returns and the current market value of milk based on UK wholesale price movements) are moving in a more positive direction. AMPE rose by 0.8%, to 38.0ppl, MCVE rose by 4.2% to 38.1ppl. Both indicators in the UK remain much lower than a year earlier, with AMPE and MCVE down by 4% and 20% respectively.

The latest published farmgate price was for October with a UK average of 37.0ppl. Latest announced farmgate prices for January were relatively positive with most processors announcing increases or no change to

their pricing. On retail aligned contracts Tesco and M&S continued to hold their prices from November, while Sainsbury's and Co-op saw increases of 0.08ppl and 0.03ppl respectively, following lower pricing last month. Waitrose was the only retailer to announce a price drop for January, lowering their milk price by a further - 0.50ppl.

On non-aligned liquid contracts, all members of the AHDB league table continued to hold their prices. This results in no change for Crediton since July, however Freshways, Muller Direct, and Paynes Dairies adjusted their prices in the autumn.

Cheese and manufacturing contracts generally saw more positive movements than liquid contracts. Input costs continue to move in a positive direction but are still ahead of where they were prior to inflation rocketing.

Research in USA Shows Possibility of Turning Dairy into Bioplastics

As the issue of plastic pollution continues to escalate in the United States, a scientist from the Agricultural Research Service (ARS) is developing a new approach to combat it. Dr. Atanu Biswas, a research chemist at the ARS National Center for Agricultural Utilization Research in Peoria, Illinois, has spent much of his career exploring ways to convert agricultural waste products into bioplastics.

Dr. Biswas' latest effort involves utilizing dairy waste, specifically lactose, a type of sugar produced by the dairy industry as a by-product. Lactose is composed of saccharides, which have the right chemistry to form bioplastics. Using this material as a starting point, Dr. Biswas has been able to transform it into polyurethane and other bioplastic polymers with wide-ranging potential applications in various industries and consumer products.

One significant advancement in Dr. Biswas' approach is the use of microwave technology, which allows him to make bioplastic polymers quickly. Additionally, because lactose is a disaccharide of galactose and glucose sugars, it may be biodegradable, although further research is necessary to confirm this.

The challenge facing scientists who develop new bioplastics is replicating the characteristics that conventional plastics offer, such as hardness and flexibility. While lactose-based bioplastics do not currently replicate the full range of characteristics that conventional plastics offer, they can be useful for certain niche applications like insulation, cushioning material for furniture, footwear, rubber flooring, or some medical equipment. With additional work, Dr. Biswas believes

they can be further developed to be useful for hundreds of applications.

Dr. Biswas explained that overall, bioplastics can replace a significant portion of conventional plastic supplies but may not entirely replace them. He added that eventually, everything could be replaced, but it's a considerable jump from where they are now to there.

The novel bioplastics represent a "win-win-win situation" for industry, farmers, and consumers. For industry, they provide an opportunity to present a cleaner and greener image while taking advantage of a renewable feedstock that is readily available. Consumers who recognize the problem that plastics present will appreciate a less damaging option for the environment. For farmers, finding a use for what would otherwise be waste is also

All NZ Dairy Products Now Able to Enter China Duty-Free

All New Zealand dairy products are now able to enter China duty-free, as safeguard duties on milk powder ended in December 2023, marking the removal of all remaining tariffs agreed upon in the free trade deal between the two countries.

New Zealand was the first developed country to sign a free trade agreement with China in 2008, with the imports of milk powder subjected to the longest phase-out. An upgraded trade deal was entered when former Prime Minister Jacinda Ardern met President Xi Jinping in 2022.

"This is good news for our dairy sector. The removal of these remaining tariffs is expected to deliver additional annual tariff savings of approximately \$350 million," Trade Minister Todd McClay said in a statement.

The (free trade agreement) continues to deliver benefit to the New Zealand economy and to underpin the New Zealand-China trade relationship. China is New Zealand's largest trading partner, with two-way trade exceeding \$37 billion in 2021. Annual dairy exports to China have averaged 1.4 million tonnes, worth about \$8 billion each year over the past three years, around half of which was milk powder, official data showed.

Safeguard duties are emergency tariffs that countries use to shield domestic industries against intense competition from a sudden surge in imports of a particular product.

The so-called special agricultural safeguards mechanism in the free trade deal was designed as a temporary measure. The tariff preferences are applied up to a designated volume and China's standard tariff applied to imports above the safeguard trigger.

Safeguards duties on milk and cream, butter, and cheese ended in 2021, while those on milk powders ended on December 31, 2023.

Fonterra Pioneers Dairy Protein Innovation for Holistic Health

The market for dairy proteins is diversifying and moving into the popular health and wellness categories, such as gut health and functional foods. Moreover, consumers and companies increasingly seek out offerings that address specific health needs and that are obtained through sustainable practices.

At the same time, advancements in dairy protein technology, which previously focused on sports nutrition, enhance the nutritional benefits, taste, texture and ingredient variety, opening even more avenues for innovation.

Dr. Shakti Singh, the category and innovation manager for proteins at Fonterra, while speaking on growing space and how the company is meeting evolving customer demands said, "Protein is a macronutrient that has clinically proven health benefits and hence is of high interest across broad consumer groups, from the young to the elderly, for muscle recovery, weight management and general health and well-being for both physical well-being and immunity. The global consumer has started to put weight behind other wellbeing benefits, especially mental health. We see a consumer need for nutritional solutions catering to holistic well-being - brain, body and inner - without compromising on the taste and texture of high protein products. These are key factors driving our product development and innovation in the protein area."?

Event CALENDAR

The Kisan Dairy Summit

IDA Punjab State Chapter and Verka, Ferozepur Dary are jointly organizing "**The Kisan Dairy Summit**" on 30th January 2024 at Ferozepur, Punjab. **Venue:** Auditorium of Genesis Institute of Dental Science & Research Ferozepur-Moga Road, Punjab. **Time:** 9 am to 5 pm



THE JHARKHAND STATE COOPERATIVE MILK PRODUCERS' FEDERATION LTD.

Near Farmers Training Centre Campus, Sec-II, H.E.C., Dhurwa, Ranchi – 834004

Ph. No: 0651-2270046, Email: purchase@jmf.coop, Website http://www.jmf.coop,

The Jharkhand State Co-operative Milk Producers' Federation Ltd (JMF) is an apex Co-operative organization for dairy development in the State of Jharkhand and is engaged in processing of milk & manufacturing of milk products under the brand name "**Medha**" and manufacturing of various types of supplements like Cattle Feed, Area Specific Mineral Mixture and Bye pass protein under the brand name of "**Medhadan/Medha Hypro**".

We intend to procure raw material for cattle feed, milk/milk commodities, food grade ingredients, packaging material, various types of chemicals, process instruments, several mechanical & electrical equipment and spares, SS Pipe and fittings, IT Hardware and its spares and software, laboratory equipment/glassware, various types of stationery items, printing material, transporters, oil & lubricants etc. on regular basis.

The interested reputed firms dealing in above material are requested to get themselves registered with us. For more details, please visit our website www.jmf.coop and send us dully filled Registration Form along with the requisite documents as per prescribed format.

For any tenders and related information, interested parties may regularly visit our website: **www.jmf.coop**