



IDF's World Dairy Summit 2022

– A Brief Report

The World Dairy Summit by the International Dairy Federation (IDF) saw the coming together of a congregation of over 10,000 national and international dairy professionals, delegates, researchers, farmers, and dignitaries in India after 48 years. Participants from over 30 countries were a part of this first physical conference organized after a hiatus of two years.

The four-day-long International Dairy Federation (IDF) World Dairy Summit 2022 was organized during September 12-15, 2022 at India Expo Centre and Mart, Greater Noida, (Delhi NCR). The theme of the event was 'Dairy for Nutrition and Livelihood'.

During the Summit panel discussions, side events, posters session, networking, cultural activities, and technical and social tours were organized. Over 1,500 national and international dairy leaders, experts, farmers, processors and producers attended 24 sessions grouped into various thematic verticals, such as Global dairy situation and trends, Dairy Science and Farming techniques and innovations, Socioeconomic and Livelihood, Nutrition and Health, as well as Sustainability and Climate Action discussions, provided by speakers and specialists from all over the world. In addition to the in-person public, global audiences participated in the sessions online.

The programme included various panels integrated by prestigious speakers, many of whom are distinguished members of key stakeholder organizations, such as FAO, Codex, WHOA, OECD, UNEP, World Bank, and Global Children Nutrition Foundation. About



Hon'ble Prime Minister Shri Narendra Modi at Inaugural Dais. To his Left: Shri Yogi Adityanath, CM, Uttar Pradesh; To his Right: Union Minister of Fisheries, Animal Husbandry and Dairying, Shri Parshottam Rupala

120 speakers and panelists participated in the session.

Participants of the IDF Summit included Farmers-925, Delegates-776, 114-national and international exhibitors (6,900 sq. meters space showcasing latest technologies and innovations in the dairy sector), 6900 trade visitors to exhibition area, and 30-sponsors, including main sponsors *i.e.* AMUL, Nandini and Mother Dairy.

Hon'ble Prime Minister Shri Narendra Modi inaugurated the Summit. Chief Minister of Uttar Pradesh Shri Yogi Adityanath; Union Minister of Fisheries, Animal

Husbandry and Dairying, Shri Parshottam Rupala; Minister of State for Fisheries, Animal Husbandry and Dairying, Dr. Sanjeev Kumar Balyan; IDF President Mr. Piercristiano Brazzale; IDF Director General Ms. Caroline Emond; and Members of Parliament – Dr. Mahesh Sharma and Shri Surendra Singh Nagar were other dignitaries who were present on the occasion.

Welcoming the delegates President, IDF Mr. Piercristiano Brazzale appreciated

President, IDF Mr. Piercristiano Brazzale delivering his Welcome Address



NDDB and its official for organizing the IDF World Dairy Summit 2022 very well. He welcomed the Hon'ble Prime Minister for agreeing to inaugurate the event. He also thanked the other dignitaries on the dais. Recalling the last two years of COVID-19 era, wherein dairy sector was able to sustain its business for which he thanked the dairy processors, workers, marketers, etc. who had worked selflessly during the difficult time.

Inaugurating the IDF's World Dairy Summit 2022, Prime Minister Shri Narendra Modi said, "The potential of the dairy sector not only fuels the rural economy, but it is also a major source of livelihood for millions of people around the world. I am sure this summit will play a huge role in enhancing each other's knowledge and learning from each other at the level of ideas, technology, expertise and traditions related to the dairy sector."

Talking about the timing of the summit, which was organized in India after a gap of almost 48 years, Shri Modi said, "Today's event is being held at a time when India has completed 75 years of its Independence. It is also a coincidence that more than 75 lakh dairy farmers of India have also joined this programme through technology."

Describing some of the unique characteristics of Indian dairy sector, he said that the rearing cattle and milk and milk products related business and activities are part of our ancient culture. Indian dairy sector is known for production by masses instead of mass production. Small and marginal farmers are having either one, two or three cattle through which they are contributing more

towards milk production of India. Indian dairy sector provides employment and livelihood to Eight crores families.

Indian dairy activity can be used as a role model for the poor countries. Cooperative model of dairying is another characteristic of our dairy sector. Under this cooperative model, through approximately 2 lakh villages milk is procured from 2 crores dairy farmers two times in a day and the milk is delivered the consumers. In this process, there is no middle man. More than 70% of the sale proceed goes back to the farmers. In the state of Gujarat, all such sale proceeds go directly in the bank account of women dairy farmers. The information about digital payment system of Indian dairy sector can be a very useful to many of the progressing countries.



Traditional Inaugural Prayer at IDF World Dairy Summit 2022

Talking about the government initiative to boost the sector, Shri Modi said, "Since 2014, our government has worked relentlessly to enhance the potential of India's dairy sector. Today, the result is visible from milk production to increased income of farmers. India was producing 146 million tonnes of milk in 2014 and now, it has increased to 210 million tonnes, an increase of about 44 per cent. Today, milk production is growing at the rate of two per cent in the whole world, whereas in India it is going up by more than six per cent."

He also highlighted the various government initiatives through programmes such as Rashtriya Gokul Mission, Gobardhan Yojana, digitisation of dairy sector and universal vaccination of animals. It has been resolved that by 2025, India will vaccinate 100 per cent of the animals against Foot and Mouth Disease and Brucellosis. It is our aim to be completely free from these diseases by the end of this decade.

Talking about use of technology in the sector, Shri Modi said, "The scale of India's dairy sector is being expanded further by connecting it with science. India is building the largest database of dairy animals. With the help of



President-IDA Dr. R.S. Sodhi with IDF DG Ms. Caroline Emond and IDF President Mr. Piercristiano Brazzale at IDF Summit

modern technology, we are doing biometric identification of animals. We have named it animal base. Digital identification of animals is being done through Pashu Aadhar, which will help in expanding the market related to dairy products along with keeping an eye on their health.” The country is also focusing to promote entrepreneurship in the field of animal husbandry. Referring to the GOBARdhan scheme, he said, “Today a huge campaign is going on in India to make biogas and bio-CNG from animal dung. It is our endeavour that dairy plants can meet most of their electricity requirement from cow dung.”

The Prime Minister also talked about another great strength of India’s dairy sector *i.e.* “Local breed of cows and buffaloes” that are known to survive even in the toughest weather. Referring to the example of the Banni buffalo of Gujarat, Shri Modi said that the breed has mixed with the desert conditions and comes out to graze in the low temperature of the night because the days are very hot. There is less water in the desert, so Banni buffalo manages with very little water.

While concluding his speech, he said, “India has always been ready to contribute to the dairy sector of the whole world and learn from all its partner countries. We have also acted very quickly on its food safety standards. Today, the country is working on such a digital system for the livestock sector, which will capture the end-to-end activities of this sector. This will provide accurate information needed to improve this sector. This summit will keep in front of itself the work that is being done around the world regarding many such technologies.”

The Prime Minister also

inaugurated an exhibition in the complex on the history of Indian dairy sector. It is a rare showcase of the tremendous potential of the dairy sector.

By 2047, India’s Share in Global Milk Production will be 45%: Experts

Technical Session on ‘Nutrition and livelihood’: Leaders from the sector underscored the need for sustainable development of the dairy sector

Moderating a session titled ‘**Nutrition and Livelihood**’, IDF President Mr. Piercristiano Brazzale talked about local dairy leaders across the world. He highlighted the interregional main purchasers of dairy products. Shri Mayank Trivedi, Senior Vice President and Global Head of Dairy SBU Nestle, spoke about how the global food and beverage brand has emerged as the leading nutrition, health, and wellness company. The termed the “Milk” as an integral part of the dairy industry. Talking about the growth of the industry over a period of time, he said, “Today, dairy is not only a source of nutrition, but it has emerged as a viable source of livelihood for millions.” Touching upon the dichotomy of nutrition versus sustainability, a topic that has attracted a lot of debate and is a part of coming discourse, he said that the dichotomy could be solved by considerable cooperation among stakeholders. He preferred to call it nutrition and sustainability instead of nutrition versus sustainability. Sustainability is a big challenge before the dairy sector that we can solve together, he added. He further added that in regeneration, India can play a key role since manure management and animal welfare are integral features of Indian dairy development history.

Another participant from

Mexico, Ms. Maite Lopez Negrete, Financial Administrator, Rancho Lucero, outlined her success story of how her family has been raising about 45,000 cattle heads and 22,000 dairy cows. Her company produces around eight lakh litres of milk every day. “In 2015, we began the construction of LONEQ, a plant capable of producing one million litres of milk per day, where fat-free milk, milk protein, casein protein and milk fat are processed.” Ms. Negrete said, “Our biggest challenge during these years was the shortage of input stock and the long time we had to wait to get it.”

Giving a visionary perspective of Indian dairy industry, where India will be placed after 25 years, what role the dairy industry will play and what role India will lay in global dairy industry after 25 years, Dr. R.S. Sodhi, President-IDA and Managing Director, GCMMF, said, “When the previous IDF Summit was held in India way back in 1974, the country was producing 22 million tonnes of milk. Today, the figure has gone up to 210 million tonnes. The government is focussing on local production and also encouraging local dairy products.” He predicted that in the next 25 years, India’s milk production will reach 628 million tonnes, while demand for milk and dairy products will increase to 517 million tonnes. He further suggested that by 2047, India will have export surplus of around 111 million tonnes and per capita consumption of milk in India will double from 427 grams to 852 grams per day. India’s contribution to the global production will increase from the current 23 per cent to 45 per cent in the next 25 years. He further added that the incredible growth story of Indian dairy industry is due to the fact that the country has developed by harnessing

the collective power of local ecosystem. The classic example is Amul, where women empowerment has been taken to a new level. Today, the industry has provided employment to more than 100 million. Yet another reason for the growth of the sector in India is that India's supply chain is the most efficient. Union Minister of Fisheries, Animal Husbandry and Dairying of India, Shri Parshottam Rupala also took part in the discussion.

Cooperative Institutions' Firm Foothold in Dairy Sector

The dairy sector in India is dominated by cooperative institutions that have successfully competed with big organisations.

Cooperative institutions have become forces to reckon with in the dairy industry. Unlike other sectors of the economy, which are fundamentally dominated by private players, the dairy sector has numerous cooperative institutions that have made it big. There is surely a lesson or two to learn from this. In fact, Prime Minister Narendra Modi in his inaugural address at the World Dairy Summit 2022, said, "Cooperative organisations have played a major role in the growth of the dairy sector." Indian dairy sector is marked by a healthy mix of cooperative and private entities. This has shown that cooperative organization can actually be at par with the corporate mammoths.

Address by Union Minister of Home Affairs and Minister of Cooperation

Union Minister of Home Affairs and Minister of Cooperation, Shri Amit Shah, said, "The Indian dairy sector has a unique model where 70 per cent of consumer money goes back to the farmers." India was the 11th largest economy in 2014 and now



Union Minister of Home Affairs and Minister of Cooperation, Shri Amit Shah addressing at the IDF Summit 2022

it has moved up to number five. He said, "I am confident that we will reach the third position in just a few years." He said that the dairy industry should adopt professionalism, the latest technology, computerisation, and digital payments in a big way, otherwise it could face difficulties. Dairy producers were asked to increase production in order to meet growing domestic demand and to supply milk to poor nations. Government will assist in establishing two lakh dairy cooperatives at village level before the 2024 election, he announced. Shri Jatindra Nath Swain IAS, Secretary (AH&D) and INC IDF Chief, said, "Cooperatives' networking is their biggest strength and the only solution to rural economy problems. Cooperatives are small entities sitting in different parts of the country while keeping interconnected. These cooperatives remain the only answer to the development of the economic framework of the rural areas." Mr. P. Brazzale, President of IDF, said, "Cooperatives play important role in dairy sector globally; role of smaller ones must be recognised. Cooperatives contribute to dynamise the community. It helps in

building ethical value chain and to maintain local financial stability."

Success Story of Danish Cooperatives

Talking about the expansion of cooperatives, Snorri Sidgurdsson, senior project manager of Arla Foods in Denmark, said that when cooperatives grow, they need to merge. His cooperative organisation Arla Foods has its headquarter in Denmark but is spread out in seven different countries. He said, "The dairy sector has aided in rural prosperity, women empowerment and the growth of economy. The challenge is to incorporate legal management." He further highlighted that in a cooperative organisation, the farmers are greatly benefitted.

Nine Greenfield Dairy Plants to be Ready by 2024: CM Yogi

Uttar Pradesh Chief Minister Shri Yogi Adityanath said that nine new greenfield dairy plants will be operational in the state by 2024. The CM said this while participating in the IDF's World Dairy Summit 2022 at India Expo Mart, Greater Noida, on September 12. Welcoming the global stakeholders of the dairy sector to invest in the state, Shri Yogi said that Uttar Pradesh (UP) is India's largest milk producer. Seeking



UP Chief Minister Shri Yogi Adityanath addressing at the IDF Summit 2022

National Dairy Development Board's support for the dairy sector in the state, he said the state government will extend all cooperation for the same. He said the state now has 319 lakh metric tonnes of annual milk production and contributes 16 per cent of India's dairy production. UP is the largest state in India in terms of population and it is also the highest milk producing state in the country. He further added that this makes the holding of the World Dairy Summit in UP even more relevant.

Shri Yogi said that majority of people engaged in animal keeping comprise those who have taken it up as a traditional occupation. But when we link it with technology and modern approach, then it will help in increasing their income manifold. In the organised sector, the state has 110 functional dairies, and it includes those from the cooperative sector, he said. There are also 8,600 milk committees through which more than four lakh members engaged in milk production are active in the state. At present, UP is working on a war footing to start nine new greenfield dairy plants. These plants will become functional in the next one to two years. The CM praised the Balinee Milk Producer Company, which was set up in 2019 in Jhansi, by women self-help-group (SHG) with over 41,000 members. Now, it produces 1.35 lakh litres of milk daily from 795 villages in six districts of the Bundelkhand region. "This women-led SHG now has an annual turnover of ₹150 crore and net profit of ₹13 crore. Balinee Milk Producer Company is an exemplary model for a state like UP," he apprised the gathering, consisting of Indian and global dairy industry stakeholders. The UP government is working for

investments in the state in the next five years under the Nand Baba Milk Mission, he said. "The state government has come up with a new policy which offers several incentives and is ready to work on any exemplary model in the dairy sector within India or anywhere in the world," said Shri Yogi. Works to the tune of ₹300 crore have been approved for the state under the Centre's Animal Husbandry Infrastructure Fund and the state government has also received a commendation letter from the Centre for the good work done in the sector. He added that so far 84 lakh cattle have been vaccinated in the state under a central government initiative started in 2019.

Setting Sights on Sustainability

Veterans from the dairy industry discuss how to incorporate sustainable practices within the dairy sector.

From marketing trends to the dairy scenario of India, there was certainly no dearth of innovative ideas and trends floating around. The opening day of the summit was filled with standing committee meets that discussed varied aspects of the dairy sector. To talk about '**Food Policies and Regulation**', a five-member panel was set up comprising Tiensen Thanawat, Director of Animal Production and Health Division (NSA); Meka Whitiri, Minister of Food Safety and Associate Agriculture USDA; Jason Hefemeister, acting Under Secretary for Farm and Foreign Agricultural Services USDA; and Shri Parshottam Rupala, Union Minister of Fisheries, AH&D, Government of India. The objective of the session was to provide to the summit participants an overview in which dairy sector has been operating around the world.

Sustainable Dairy Revolution

Tiensen Thanawat emphasised on the sustainability aspect and said, "We, international dairy federations and dairy farmers, come together with our stakeholders to discuss matters of sustainability of livestock system and dairy sectors. With demand for high quality dairy source protein increasing, the challenge for policy makers in dairy sector is how to cut environmental impact while meeting society needs. It then becomes essential that dairy sector grows in a sustainable way in terms of environmental impact and animal health." He further added that despite the exponential growth of dairy sector, dairy farmers and producers are facing challenges of fodder, lack of infrastructure, marketing and pricing in different parts of the world. Today, the challenge for policy makers is how to reduce environmental impacts while catering to the society needs because our consumer needs the dairy sector to do more on environmental impact. Dairy products are a rich source of essential nutrients; the sector contributes to nutrition and healthy diet but we have to be concerned about the impact it leaves on our environment. Today, the good news is that there are many opportunities within the sectors to curb climate change by reducing the greenhouse gas emissions. FAO and IDF collaborate in ambitious initiative pathways to reduce greenhouse emission from dairy system. More so, we need to enhance the important role that dairy plays in food and nutrition securities. "We together need to build a global positive narrative for dairy sector. We promote sustainable, inclusive and equitable ways to achieve better production, better nutrition, better environment, and better life for more. Together, we can

make it,” he said.

Farmer-To-Farmer Support

Meka Whaitiri took the opportunity to talk about New Zealand’s high quality, high value food and beverage, and showcase New Zealand’s food safety and innovation expertise. Meka Whaitiri said, “Caring for the environment and caring for the people is something that we must aim at. Our focus ought to be on community building and we must strive to offer best farmer-to-farmer support. Moreover, the end goal must be that consumers are able to entrust that the products we produce are safe, suitable and accurately labelled.”

Making the System Robust and Resilient

Janusz Wojciechowski said, “Today’s challenge for our planet is the environmental impact and it becomes important that we develop a sustainable dairy sector. The last two years have been challenging, it destabilised the food chains in a major way. We must ensure that the system functions in all circumstances. The consequences of the Russian aggression are seen worldwide. This threatens food security in many parts of the world. Increasing recurrence of flood, animal diseases and the Covid-19 pandemic have brought our food system under threat and we must do all we can to make the system robust and resilient. To ensure more affordable dairy food for all and greater dairy food security, European Union cannot work alone.”

Addressing a session titled ‘**Sustainable Dairy for Low Environmental Impact**’ at the IDF World Dairy Summit 2022, Union Minister of Commerce and Industry; Minister of Textiles; and Minister of Consumer Affairs, Food and Public Distribution Shri Piyush Goyal said that India would be part of global



Union Minister of Commerce and Industry; Minister of Textiles; and Minister of Consumer Affairs, Food and Public Distribution Shri Piyush Goyal addressing at the IDF Summit 2022

efforts to bring down the adverse environmental impact of farming, dairy or global emissions, given the fact that the country accounted for about one-fourth of the world’s milk production.

As a country, India would like more and more engagement among nations, and being the world’s largest producer of dairy, and given the initiatives the cooperative sector owned by farmers are taking, “I too believe the global share of production over the years will see a significant rise, which is good for small and marginal farmers who hold nearly 300 moving stock that we have in India, providing supplementary income and nutrition.”

India talks of quality standards and sustainability to engage with the world. The country is keen to be a part of this global effort to bring down the impact of farming, dairy or global emissions. Suggesting the IDF to station a team in India to study the climate of various parts of the country, thereby finding out practical solutions to climate change that are relevant and applicable for small farmers.

He further said that in the next

25 years, as we move from 75 years to 100 years, our collective commitment as a nation to become a developed country, a country that takes prosperity to 1.3 billion people across the length and breadth of the country. Of the 1.3 billion people, we have nearly 70 million families, particularly amongst the very small and marginal farmers, some are having 2 or 3 acres of farmland and 2 or 3 cattle producing milk.

World Dairy Situation 2022

Jean Marc Chaumet, Economist Director at CNIEL, said, “The share of milk delivered to dairies is higher in industrialised countries. In 2021, global milk reflected difficult supply situation. We see that 2021 trends continue in 2022. After 2019, consumers are facing a new challenge which is inflation. Dairy trade is slowing down because of inflation and sluggish economic growth.”

India’s dairy industry to grow to ₹30 lakh crore in five years

Government and NDDB to further boost dairy cooperatives in the country, says Union Animal Husbandry Minister Parshottam Rupala.

India’s dairy business is set to grow by two and a half times to ₹30 trillion as the Union government promised to further boost the dairy cooperative sector for India’s forward march in the league of leading global economies. Taking part in a technical session during the ongoing IDF World Dairy Summit 2022 on Sept. 13, 2022, Chairman, NDDB, Shri Meenesh Shah, said, “The current value of Indian dairy business is close to ₹13 trillion. We expect this to more than double in the next five years and reach close to ₹30 trillion by 2027.” According to

IDF WDS 2022



Chairman, NDDB Shri Meenesh Shah addressing at the IDF Summit 2022

Shah, while the dairy sector will maintain an average growth rate of 15 per cent, some of its value-added verticals like organic milk, cheese, flavoured milk, lassi, etc., will be growing at over 20 per cent. “These products are slated to drive the growth of the Indian dairy sector in the coming years,” he added.

Speaking at the session on future of dairy industry, Union Minister for Fisheries and Animal Husbandry Shri Parshottam Rupala said that the country has a sound



Union Minister for Fisheries and AH&D Shri Parshottam Rupala addressing at the IDF Summit 2022

organisational structure to help the stakeholders in dairy business to take the sector to the next level. “We all know how dairy cooperatives have played a crucial role in the emergence of India as a global dairy powerhouse. The government is committed to give further boost to dairy cooperatives in association with NDDB as the country is bound to make further gains in dairy output,” Shri Rupala said addressing an impressive gathering of delegates from around 50 countries and senior office bearers of leading global agencies like IDF, FAO, European Commission, etc.

“I am happy to tell you that the country now has a set of food policies which match global benchmarks in dairy and other food products. We have food regulator like FSSAI which is playing a critical role in bringing in transformative regulations,” Shri Rupala said. The value addition in India will be defining the trend in the future. He said that the government is not only committed to help stakeholders in shoring up production but has also put in place regulations comparable to the global standards to ensure that consumers get nutritious dairy products.

The IDF Summit also saw participation by some of the leading global dairy experts who emphasized on new challenges that have surfaced post-pandemic. “Two key challenges that have surfaced in the recent years for the global dairy industry relate to emergence of bovine disease in some countries affecting their cattle force and inflationary pressures that have also gripped dairy business. Global stakeholders need to come together to deal with these challenges which are making the nearterm prospects somewhat uncertain,” Janusz Wojciechowski, EU Commissioner for Agriculture, commented.

Animal Health Key for Growth
Participants at a technical session discussed threadbare the various aspects of animal health and welfare.

In recent years, the welfare of animals has drawn the attention of the stakeholders in the dairy sector. Experts discussed the issue in detail in a technical session during the Summit. Talking about the threat the animal husbandry sector is facing across the global due to outbreak of diseases, Dr. Hirofumi Kugita, Head of World Organisation for Animal Health (WOAH), regional representation for Asia Pacific, said, “Since 2020, Lumpy Skin Disease (LSD) has been reported in 45 countries across the world. Since animal health is of tremendous importance, WOAH has chalked out a comprehensive policy on animal welfare.” He further added that WOAH has 300 reference laboratories across the world where animal diseases are tested. Talking about the initiatives the Government of India is taking for the welfare of animals, Shri Upamanyu Basu, Joint Secretary, Department of Animal Husbandry and Dairying, said, “The Prime Minister said one very crucial thing during his inauguration address event that in India the dairy sector is more about production by masses than mass production. This is a unique model that India presents to the world dairy industry. This unique model provides employment to eight crore farmers.” Shri Basu said the health of animal population is important since any disease may affect not only the cattle but also impact the livelihood of the owners. He added that National Animal Disease Control Programme (NADCP) launched in September 2019 aims at controlling FMD (Foot and Mouth Disease) and Brucellosis by 2025 with vaccination and eventual

eradication of FMD by 2030 by vaccinating all eligible susceptible livestock against FMD. NADCP is a flagship scheme launched by the Prime Minister to control FMD and Brucellosis by vaccinating 100 per cent cattle, buffalo, sheep, goat and pig population for FMD, and 100 per cent bovine female calves of 4-8 months of age for Brucellosis with the total outlay of ₹13, 343.00 crore for five years (2019-20 to 2023-24).

Minister of State for Fisheries, Animal Husbandry and Dairying, Dr. Sanjeev Kumar Balyan, said, “Our department is trying hard to promote animal welfare. We must work together to prevent the spread of some of the new animal diseases to protect our livestock. All stakeholders must cooperate with the government to check the spread of new diseases from one country to another. This year we are facing the spread of African Swine Flu and LSD and we must protect our livestock.”

Sparking New Conversations

From formulating C-Sequ guidelines to raising awareness about the importance of ecosystem services, the dairy sector is mulling over initiatives for overall welfare.

The dairy sector has evolved over the years. While the sector has been able to make great strides in production, it is now shifting its focus on reducing its environmental impact on the planet. On the second day of the Summit, a panel discussion on the importance of the ecosystem services provided by the dairy sector was held. The insightful discussion introduced us to the novel concepts that the dairy sector is bubbling under. While one of the panel members talked about the importance of ecosystem services in the dairy sector, the audience were also made aware about the concept of carbon sequestration.

Ecosystem Services

Talking about how ecosystems play a significant role in upholding the dairy sector, Anna Bloomberg, Communication Strategist and Policy Advisor, said, “Today, we will take you to a slightly smaller place and a slightly smaller country, Sweden. Here, farmers have an indispensable role to play in the culture of ecosystems services. It’s about providing a beautiful landscape and creating conditions to create tourism. It is important to emphasise that dairy farmers are also dependent on the existing ecosystems services.”

Care about Ecosystem Services

“Dairy production is big to the environment; it unfortunately impacts the carbon footprint of the planet but the positive environmental impacts are lesser known. We need to have a more balanced perspective and here the ecosystem services are required. Also, the ecosystem services are fundamental, if we are to fulfill the global sustainability goals. So, it is important to raise knowledge and awareness about ecosystem services,” said Bloomberg.

Say It a Thousand Times

Informing how more and more people can be made aware about the burgeoning importance of ecosystem services, she further added, “Keep it simple. Messages that are easily repeatable and messages that will be remembered are going to be effective in promoting sustainability. The most important thing is not to give up and stay persistent in the face of indifference. When you say the same things over a thousand times, it might be the time when people actually listen. If you are a communicator, share knowledge and add value to your communication. If you are a researcher, do more research in

ecosystem services. If you are a dairy farmer, consider how you can add value to your ecosystem, which can add value to your product and get a high price for your products.”

Carbon Sequestration

The concept of carbon sequestration is acknowledged as a potential way for agriculture to not just emit carbon dioxide, but store it, removing it from the atmosphere. Talking about carbon sequestration, Brian Lindsay said, “It is easy to say but a lot harder to quantify carbon footing. We have been asking this for many years, to be precise since 2010, and we ask every second year. In 2016, the signs were positive; that is when we decided to start this as an industry and implement it on a grassroot level. Carbon capture and storage ought to hold a place in the dairy sector. We want our farmers to be profitable, we need to be proactive since the sector is ahead in the curve.”

Constraints of C-Sequ Project

Talking about the challenges and constraints of the C-Sequ project, Khaoula Essoussi said, “We did a study to test the credibility and the feasibility of the C-Sequ guidelines and to get real learnings of the guidelines. We learnt from the study that today it is difficult to compare two different farm models. It needs precise data inputs that are not easily available at farm levels. There is no exact science for it as yet but the best effort is required.”

Talking about the upliftment of rural economy, Shri Giriraj Singh, Minister of Rural Development and Panchayati Raj, said, “The country will progress when the farmers progress, the farmers will progress, when the agriculture with livestock progress. Agriculture with livestock will progress when the cost of



Minister of Rural Development and Panchayati Raj Shri Giriraj Singh addressing at the IDF Summit 2022

production will decrease, be it of milk or of other crops.” He further requested the foreign panellists to introduce a model in rural India that can be run through a makeshift technology so that the rural parts of India can make meaningful contribution towards the growth of the global dairy sector.

Awards at IDF WDS 2022

The winners of the inaugural “IDF Professor Pavel Jelen Early Career Scientist Prize 2022” are: **First Place:** Angela Costa (Mid-IR spectroscopy for an accurate prediction of IgG concentration in bovine colostrum);

Equal Second Place: Debashree Roy (Composition, structure, and dynamic digestion behaviour of milk from different species)

Equal Second Place: Prabin Lamichhane (Structure-function relationships: new insights into controlling split and crack defects in cheese)

Third Place: Nick Smith (Understanding dairy’s contribution to a sustainable food system)

The IDF Dairy Innovation Awards was handed out on the

inaugural day. Shri Mayank Trivedi, Senior Vice-President & Head of Strategic Business Unit Dairy, Nestle, keynote speaker of the event, delivered some inspiring words to all the winners, finalists, and attendees. Also, Shri Ashutosh Manohar, South Asia Managing Director of Tetra Pak, pronounced a short speech while handing out the Innovation on Climate Action award.

The IDF Dairy Innovation Awards is an IDF’s initiative designed to celebrate and encourage innovative practices across the global dairy sector, which was launched on February 17, 2022 in partnership with Zenith Global and supported by headline sponsorship from Tetra Pak. With a particular focus on Sustainability, both in terms of environmental care and positive social impact, the awards seek to stimulate innovative practices that improve the farming and processing of milk and dairy foods.

The winners under the various categories were as under:

Innovation in Sustainable Farming Practices - Environment

- **NDDB, India** - Manure Value Chain Model, India, a system of small familiar biogas to obtain organic fertilizer and gas for cooking has an extraordinary socio-economic value for Indian communities. An innovative effort to bring existing technology in the smallholder context to scale by creating a business model that rewards the value of manure for small holder farmers. This is all the more important as low-yielding smallholder farms have a strong environmental impact. Improvements and innovations in this area, create a large impact if taken to scale. A really great example of the circular economy at the smallholder scale. The high score is due to its focus on

smallholders who are the majority of dairy farms in India and worldwide.

Innovation in Sustainable Farming Practices - Animal Care

- **Dairyics - Dairyics Meadow-Sense, Israel**, a smart, innovative technology that is extremely useful in helping the farmer to stay on top of the health and welfare of their livestock, and be able to take action earlier, plus ensure that each animal is getting the care and attention that they need.

- **NDDB, India - e-GOPALA, India**, an extraordinary innovation that allows the farmer to be in control.

Innovation in Sustainable Farming Practices - Socio-Economic

- **Moofarm Private Limited - Mooofarm App, India**, an app that gives the possibility to stay in touch with veterinaries, is a great example of the application of digital farming. It is unique in its use of facial recognition for identification and gamified incentives.

Innovation in Sustainable Processing

- **Brazzale SpA - Fully automated maturing warehouse 4.0, Italy**, Brazzale SpA’s next-generation cheese ripening facility matches new technology with green energy generation, a model for other cheesemakers around the world.

Innovation in Research & Development - Farming

- **Dairyics - Dairyics Meadow-Sense, Israel**. Automatic and digital farming is the future of zootechnic and agriculture to increase efficiency and productivity, finally, reduce the environmental impact and obtain and ensure animal health and care.

- **NDDB, India - Establishing system of Genomic Selection for buffaloes in India, India**. The use of genomics to improve the selection of

buffalo has a socio-economic high value. Genomic selection will allow for improved individual productivity thereby decreasing GHG intensity of production and increasing value back to the dairy farmer.

Innovation in Research & Development - Collection & Processing

- **NDDB, India** - NDERP (NDDB Dairy ERP), India, an open source-based ERP integrated with AMCS (Automatic Milk Collection System) software, India, a system that guarantees control of the milk delivered by the farmers, with important socio-economic consequences. NDERP provides transparency in milk collection and food safety analysis for payments to small shareholder dairy farmers.

Innovation in Research & Development - New Product Development

- **Yili Group** - Yili Drinkable Cheese, China. Yili Drinkable Cheese is a new product in the cheese category making it a drinkable product. During the development of the cheese market for children in China. This is an innovative product that could open a new system of consumption of cheese.

Innovation in Research & Development - Food Safety

- **Yili Group** - Construction and Application of the “Food Safety Risk Analysis Model” in Dairy Enterprises, China, a fully integrated system of control to guarantee food safety.

Innovation in Research & Development - Consumer Nutrition

- **Gujarat Cooperative Milk Marketing Federation Ltd (Amul)** - Amul Protein Buttermilk & Amul Protein Lassi, India, a high-quality product for infant fortified, based on

the latest data of nutrition survey.

- **Société des Produits Nestlé SA; Nestlé Product Technology Centre Dairy** - Unlocking iron fortification in dairy to address micronutrient deficiency, Switzerland, a great innovation that provides for iron fortification to address iron deficiency, achieving bioavailability of iron through fortification without negative effects and, therefore, a commendable breakthrough.

Innovation in Sustainable Packaging

- **Wipak UK Ltd.** - Recyclable Butter Wrap, United Kingdom. Replacing aluminium and polyethylene with an FSC-certified is a very innovative packaging system. It accurately identifies the UN Sustainability Goals and achieves via use of this packaging material.

Innovation in School Milk Programmes

- **Karnataka Co-operative Milk Producers' - Federation Karnataka Cooperative Milk Producers' Federation Ltd.** This project is addressing with success the hard realities of that state. It's a clearly beneficial program to industry, as well as the children, reaching large numbers of beneficiaries, with substantial potential for economic growth for small holder producers.

Innovation in Climate Action

- **China Shengmu Organic Milk Limited** - Quality Milk in the Desert, China, for its holistic approach to climate action, targeting some of the most impactful ways to make dairy more sustainable, including reducing enteric emissions, improving biodiversity and carbon sequestration via reforestation.

Mr. Piercristiano Brazzale, President-IDF added that he was particularly impressed by the

sophistication and technology that Indian dairy value chain has incorporated. This is reflected upon the breath-taking metrics that Indian Dairy shows and its projected future growth which will surely consolidate it as the largest on a global scale.

Ms Caroline Emond, IDF Director General said that IDF Summit was the occasion for the global dairy sector actors and stakeholders to meet and discuss in person the world dairy agenda, share knowledge and innovations, identify patterns and trends for the future and generate networking and business opportunities. It was also an opportunity to get to know to learn about the Indian Dairy sector and learn from its experience.

Event Contributed Net-zero Carbon Dioxide Emission

One of the unique feature of the four-day IDF World Dairy Summit 2022 was that the organizers of the event had taken various measures to ensure that the event contributed net-zero carbon dioxide emission into the environment. Major emission sources include travel, energy consumed, paper and resource use and waste generation. Over 40 electric cards and five electric buses were organized to ferry the delegates, staff, vendors and exhibitors from the airport or their hotels to the Expo Mart. There was zero single use plastic being allowed at the event as water was provided through dispensers and glass bottles. Paper cups were also being given to the guests. Instead of using vinyl sheets for flex banners, cloth was being used and pamphlets were made from handmade papers. Food waste was going to the venue's composter that further generates manure. ■

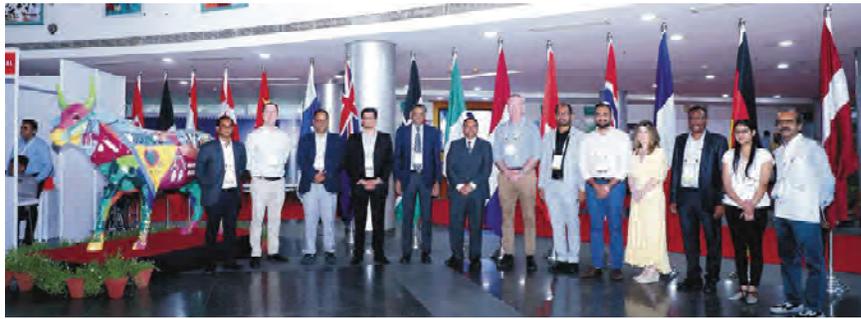
IDF WDS 2022



⤴
**Hon'ble PM
 Interacting
 with DG and
 President
 IDF at the
 Inaugural
 Ceremony**



⤴
**Chairman,
 NDDB with
 Other VVIPs
 at the Venue
 of the Summit**



Sectional View
 of audience ⤴

*Farmers at
 the Summit* ⤴



⤴
Cultural Show ⤴

Photo Gallery

IDF World Dairy Summit 2022

