

Annual Symposium

16 May 2024



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**DAIRY'S
BOUNDLESS
POTENTIAL:**

Advancing science and technology through the International Dairy Federation

SUMMARY

The 2024 South African Society of Dairy Technology (SASDT) Symposium was held in Menlo Park on May 16, with the theme "Dairy's Boundless Potential: Advancing Science through the International Dairy Federation."

The highlight of the day was the session featuring the International Dairy Federation (IDF), showcasing its expertise across the dairy chain. IDF Standing Committee members discussed various topics, including dairy politics, economics, environment, animal welfare, standards, labelling, identity, nutrition and marketing.

Dr. Nick Smith from Massey University in New Zealand emphasized the importance of dairy in sustainable diets, while Professor Terence van Zyl from the University of Johannesburg explored the potential of AI in the dairy industry. Alwyn Kraamwinkel shared insights on the global and local dairy situation. Agri-Expo wrapped up the event with a review of the South African Dairy Championships with a selection of award-winning dairy products to enjoy.

THE WORLD DAIRY SITUATION: GLOBAL AND LOCAL

Alwyn Kraamwinkel, CEO of SAMRO, presented the economic outlook for dairy in South Africa in 2024. GDP growth is expected to be slightly higher than in 2023 but remains relatively low. There is a high risk that the growth rate may fall short of the Reserve Bank's expectation of 1.2% and the IMF's projection of 0.9%. The country faces significant uncertainty due to global instability, potential disruptions from upcoming general elections, poor public service delivery, and adverse weather conditions impacting agricultural output. Consumer purchasing power is being eroded by rising prices, high unemployment, and a lack of meaningful economic growth.

In the dairy industry, substantial price increases for producer and retail dairy products were observed from 2021 to 2023. These increases were driven not by higher demand but by rising production and distribution costs. Although there has been no significant growth in demand for most dairy products or unprocessed milk, late 2023 saw notable increases in retail sales quantities for certain products while fresh milk and UHT milk experienced declines.

The presentation emphasized the need for continuous monitoring of economic and industry variables, and the importance of timely and appropriate responses to ensure that the supply of unprocessed milk and dairy products closely matches demand.

SUSTAINABLE NUTRITION: THE DELTA MODEL

Dr. Nick Smith from Massey University gave a virtual presentation on the importance of dairy in a sustainable diet. The Delta Model® is a global food system mass balance that uses information about the current production of major food items to predict the nutrition available to the average global citizen both now and in the future. Nutrition is an essential part of sustainability, alongside environmental, social, and economic aspects. Nutrition is also more than just calories and protein – "we need to think about the supply of all essential nutrients", including vitamins and minerals, from the farm to the consumer. This is where nutrient-dense foods, such as dairy, have an important role to play.

His talk explained how well the world currently feeds itself and what alternative scenarios could exist for this in the future. Dr. Smith highlighted the nutrient gaps in South Africa and showed that dairy can play a critical role in meeting the nutritional needs of the population. He explained the research of the Sustainable Nutrition Initiative®, a New Zealand research group building models to understand how individuals and the global population can be fed in the future, with a particular focus on dairy. The Delta Model® is available on the university website and a free tool to use.

THE POTENTIAL OF AI IN THE DAIRY INDUSTRY

Professor Terence van Zyl, from the University of Johannesburg's Institute for Intelligent Systems, where he holds the Nedbank Research Chair, addressed some of the challenges faced by the dairy industry. These include the optimization of production, expanding the dairy market, labour shortages, supply chain resilience, environmental sustainability, governance, animal health and welfare, and threats to new entrants.

"AI enhances decision-making, insight discovery, and process optimization," said van Zyl. AI-powered systems provide unprecedented insights into the well-being of animals, down to an individual level. AI can predict issues before they become serious; it can optimize feed for health and production, and

help to make more informed decisions about herds. One of the biggest benefits of AI is increased productivity, which allows for the automation of numerous manual tasks, reducing reliance on manual labour.

In supply chain management, AI predicts future demand and adjusts for possible shortages or oversupply. Logistics can also benefit from AI by planning the most efficient routes. AI shifts maintenance from reactive to proactive by monitoring machine performance with sensors to spot early signs of deterioration that might otherwise be missed. This ensures that preventative maintenance can be done to ensure no operational downtime due to breakdowns.

INTERNATIONAL DAIRY FEDERATION SESSION

The IDF session began with an introductory message from Maretha Vermaak of the Consumer Education Project of Milk SA. She explained how the IDF functions through standing committees, task forces, and action teams, relying on input from experts in various fields to ensure high and credible scientific standards.

During the IDF session, six members of different standing committees gave short presentations on their priorities, followed by a panel discussion led by Lauren Longo of Danlink Ingredients, elaborating on the value of the IDF for South Africa.

STANDING COMMITTEE MEMBER PRESENTATIONS

DR NDUMISO MAZIBUKO, Economist at Sampro

The presentation covered the work of the **Standing Committee on Dairy Policies and Economics (SCDPE)**, focusing on its objective to provide the dairy sector with value-added information, data, and analysis to support the strategic plan of the International Dairy Federation (IDF). Additionally, it discussed the IDF World Dairy Situation report, which offers an in-depth understanding of the current macro supply and demand trends affecting the dairy sector.

DR MARK CHIMES, Veterinarian and Veterinary Technical Advisor For Dairy Standard Agency (DSA) and Milk SA

The treatment of health conditions in animals is done on an evidence-based basis that is supported by research to prove best practices. Animal welfare is still in its infancy and scientifically based proof of what benefits the animal's welfare most is frequently lacking. The difficulty lies in determining what animals perceive as comfort or pleasure. To this end the IDF endeavours to keep member states up to date with developments within the welfare environment on dairy farms through the **Animal Health & Welfare Subcommittee**. South Africa participates in these programs to ensure that we comply for the benefit of the animals and to ensure industry access to foreign markets that have specific requirements regarding animal welfare standards. Animal welfare is gaining

importance and South Africa cannot afford to be left behind.

DR COLIN OHLHOFF, Environmental Officer For Fair Cape Dairies

Providing sustainable and healthy nutrition to the growing human population is among the foremost challenges of the future. The global dairy sector leads in efforts to reduce environmental impact, protect natural resources, and innovate sustainable methods for producing nutritious milk and dairy products. The IDF's **Standing Committee for Environment (SCENV)** plays a pivotal role in informing the sector about environmental developments and leading on sustainability issues, collaborating closely with the wider IDF network and relevant international organizations.

JOMPIE BURGER, Managing Director, DSA and **ANNEKE VAN NIEKERK**, Consultant to The Regulations and Standards Project of Milk SA

The international food safety and quality arena aims to harmonize standards to enhance international trade and consumerism. This includes addressing labelling matters such as nutritional information, health claims, sustainability claims, allergen labelling, and the use of technology in food labelling, requiring extensive collaboration between WTO member states. The IDF Standing Committee for **Standards of Identity and Labelling (SCSIL)** monitors Codex committees'

activities to ensure that new standards relevant to the dairy sector are adopted without negatively impacting the International Codex standards, involving organizations like the ISO, SABS, and South African National Departments in the process. The interaction between the **IDF Standing Committee for Dairy Science and Technology (SCDST)** and the **IDF Standing Committee of Food Additives (SCFA)** was discussed in the panel discussion.

MARETHA VERMAAK, Dietitian of The Consumer Education Project of Milk SA

Nutrition and Health is one of the four key pillars of IDF's work, emphasizing science-based nutrition to ensure dairy's role in the diet across all age groups and addressing global nutritional gaps. The **Standing Committee on Nutrition and Health (SCNH)**, comprising international nutrition and dairy science experts, focuses on providing nutrient-rich solutions for non-communicable diseases and sustainable nutrition challenges.

The SCNH's main goal is to highlight dairy's essential role in human nutrition, organizing the annual online nutrition and health symposium of the IDF reach the global health professionals and developing various Fact Sheets, White Papers, and Position Papers. A key focus is on School Milk Programmes, with resources and case studies emphasizing the IDF's commitment to children's health, and the latest survey results will be launched during the World School Milk Day celebration in September.

CHRISTINE LEIGHTON,
Project manager of the Consumer Education Project of Milk SA
The **Standing Committee of Marketing (SCM)** evaluates marketing programs to boost local milk demand, including both commercial and generic advertising campaigns focusing on product awareness and

consumer education. A unique aspect of the SCM is its dual component, with the International Milk Promotion (IMP). The SCM oversees the Global Marketing Trends report, providing insights into global dairy sectors, while the Global Dairy Platform (GDP) collaborates with the IMP on issues like sustainability and nutrition.

The facilitator for the day was Wayne Witthoft and closing remarks by Rian Marren.

Presentations and recordings are available at

<https://sasdt.foodfocus.co.za/>

SA DAIRY CHAMPIONSHIPS: PAST, PRESENT, AND FUTURE

Breyton Milford of Agri-Expo and Graham Sutherland, chief judge of the SA Dairy Championships, gave a comprehensive report on the history of the SA Dairy Championships, sharing videos that captured the progress over the past 194 years. Breyton explained the three different awards in the SA Championships: Product of the Year, the Qualité Award, and the SA Champion.

Graham explained the method and rules/criteria for judging all dairy products with visuals from the 2024 championships. Some of the winning cheeses were featured at the cheese and wine event at the end of the day.

The mission of the SASDT is to share information that will help advance the dairy industry. It is important for the industry to leverage the resources available on the SASDT website.

SYMPOSIUM ATTENDANCE: 74

- Members attended: 46
- Non-members attended: 14
- Speakers: 14

OF WHICH

- Retailers: 2
- Input suppliers: 25
- Associations: 9
- Processors: 7



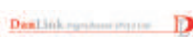
SPEAKERS AND SPONSORS OF THE SASDT SYMPOSIUM 2024

Front from left: Lauren Longo, Christine Leighton, Delene Boshoff, Maretha Vermaak, Jeandre Johnston
Back: Wayne Witthoft, Gary Coulson, Rian Marren, Bryn Thomas, Anneke van Niekerk, Barry Pretorius, Natalie Harmse, Breyton Milford, Jenny Lombard, Graham Sutherland, Coreen du Toit, Alwyn Kraamwinkel, Simone Kemp, Colin Ohlhoff, Ndumiso Mazibuko, Adri Venter, Jompie Burger, Mark Chimes.

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