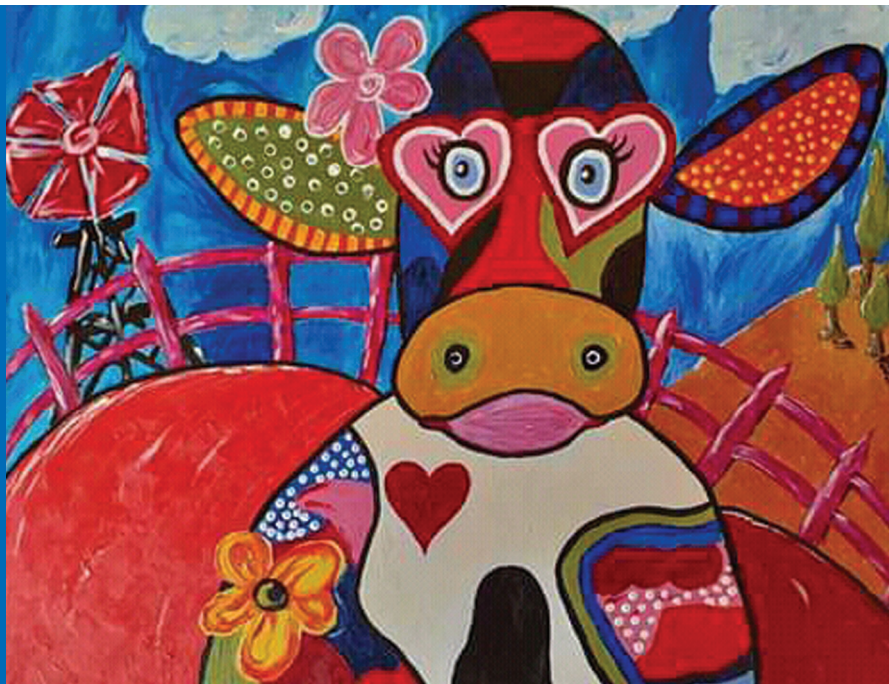


Milk Essay

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This is a publication of Milk SA. Milk SA was founded by the primary and secondary dairy industry sectors to promote a healthy South African dairy industry.



DR BONILE JACK-PAMA re-appointed as Chairman

Milk SA is happy to announce that Dr Bonile Jack-Pama was re-appointed as Chairman of the Board of Milk SA at the Annual General Meeting on 13 June 2019 and that he will continue to serve in this capacity until 31 December 2021.

Congratulations Dr Jack-Pama!

A huge **THANK YOU** to Dr Koos Coetzee

Dr Koos Coetzee recently retired from the Milk Producers' Organisation where he held the position of Senior Economist. He started his career as economist for the Milk Board and was in the employ of the dairy industry for 23 years. Since 2002, Dr Coetzee acted as Project Manager: Economies and Markets for Milk SA.

With a gift for understanding and translating various factors into logical conclusions, Dr Coetzee made an indelible mark in the local and international dairy industries. He represented the SA dairy industry in numerous local and international structures such as the International Dairy Federation and the International Farm Comparison Network (IFCN). In 2017, he received an award for agriculturist of the year in the Gauteng region and in 2013, an award from the IFCN for outstanding work at this institution.

Milk SA would like to express its appreciation for Dr Coetzee and to wish him all the best for his retirement!





Focus on statutory industry information

Milk SA serves the dairy industry with functions that cannot be carried out by any individual or group within the industry, while promoting the competitiveness of the industry. Industry Information is one such function which must be reliable, credible, timely and transparent.

Are all role-players registered and do they report to Milk SA?

Approximately 340 players are registered, of which very few default from time to time. Remedies include interest on late payments, direct communication by the Milk SA Office and legal action. Twice a year, Milk SA provides MPO, SAMPRO and DSA with provincial lists of registered role-players, which they are encouraged to share with their regional structures for input. A list is also published on Milk SA's website where the public is encouraged to report a "missing" player.

Do role-players report correctly?

Deviation reports enable the Office to follow up with the players before acceptance of the information. Ministerially-appointed inspectors routinely verify submitted forms with on-site information; and results of eight years' inspections did not raise concern or warrant significant amendments to information. Most of the time, findings reveal *bona fide* errors,

although intentional errors are sometimes found.

How is the statutory information compiled?

Most of the approximately 340 returns are submitted online, while the rest – which are emailed and faxed – are then captured online by Milk SA. As from 2018, more variables are being requested, for which the system creates reports that are scrutinized by the Industry Information Work Group (comprising staff from MPO, SAMPRO and Milk SA.)

Is the information reported timeously to Milk SA?

The regulations require submission of monthly return forms 15 days after the reporting month, but many role-players submit their returns after the required date. The information published by Milk SA in respect of the previous two months is therefore based on a sample of role-players representing at least 80% of the raw milk intake. Final figures for a year are published two months after a calendar year.

How is the statutory information disseminated?

Our products include *Lacto Data*, *Quarterly Review of the Performance of the Dairy Industry* and *Dairy Digits* which are sent electronically to registered role-players, published in *The Dairy Mail* and on www.milksa.co.za.

CULTIVATING SUSTAINABILITY IN THE DAIRY INDUSTRY



The SA Society of Dairy Technology (SASDT) held a symposium in
Kempton Park on 16 July 2019, with the theme
“Cultivating a sustainability culture in the dairy industry”.

Speakers from different dairy companies presented examples of their initiatives and contributions in this area. Partnerships between processors and producers are essential to enhance business ethics, efficiency and competitiveness. Consumers are much more sensitive about the “whole story” around the product that they consume nowadays and therefore, these partnerships include auditing programmes which go into the details of wastewater treatment, soil maintenance, staff housing, energy

conservation and recyclable packaging materials.

Water stewardship ranked high on the agenda and the delegates learned how businesses achieved substantial water recovery through advanced technology.

Delegates were excited about the opportunity that created a platform for exchanging experiences and ideas around this topic.



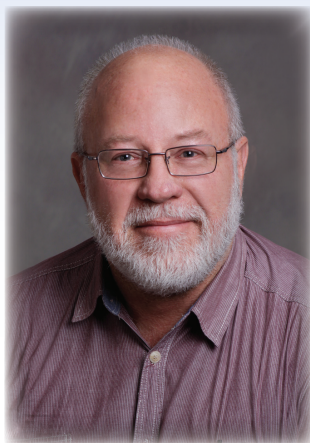
Speakers at the one day symposium were from left to right: Jonathon Hanks (facilitator, Incite) Colin Ohlhoff (Fair Cape Dairies), Stephahn Steyn (SASDT President) André Adendorff (Woodlands Dairy), Claire Lipsett (Talbot & Talbot), Christine Leighton (SASDT Vice-President), Craig Galloway (Trace and Save), Sue Viljoen (WWF) and Henk van de Hyde (Danone).

Encouraging news on qualification registration

The Advisory sub-committee on Skills Development

in the secondary dairy industry escalated the excessive delays in obtaining registered status for replacement qualifications to the CEO of FoodBev SETA.

A misalignment of internal policies between the Quality Council for Trades and Occupations (QCTO the approving authority) and the South African Qualifications Authority (SAQA the registering authority) led to an impasse in registration of an already approved qualification (2016), which was further exacerbated by the retirement of the administrator of our qualification in QCTO almost a year ago. The SETA just simply did



Gerhard Venter (Project Manager)

not follow up enough, or not with enough muscle power.

The CEO of the SETA and the SETA's ETQA Specialist attended the committee meeting in May with report backs and undertakings that presented the project

with a number of positive developments and projections. The report at this stage is that all three qualifications (Dairyman with 10 versions; Milk Reception Operator as a single version and Dairy Laboratory Analyst with eight versions) are all in some stage of consideration for approval prior to registration, or at the registration process itself. It is hoped that in a next newsletter, more positive developments can be reported.

MILK SA AGM and GM

13 JUNE 2019



The Annual General Meeting was held in June 2019 in Pretoria and well attended by Member Representatives, project managers and other industry role-players. Project reports were highlighted and the audited financial statements presented.

The Chairman, Dr Jack-Pama, said in his report that levy income had met budgetary expectations, while both internal and external audits confirmed that the administration of these measures and the execution of projects complied with good corporate governance requirements. The Chairman also expressed his appreciation for the continued contribution of MPO and SAMPRO (as members of Milk SA) to the activities and projects of the company.





DSA LAB SERVICES IN FULL SWING

The official opening of the Dairy Standards Agency's independent laboratory on 22 May 2019 marked an important milestone in the advancement of the dairy industry.

The primary goal of the new laboratory is to address the lack of a standardized system at national level for the calibration of laboratory instruments, which measure and analyse raw milk parameters namely fat, protein, lactose, milk urea nitrogen, somatic cell count and other quality traits of milk.



For more information, contact **Jompie Burger** on **012 665 4263** or email jompie@dairystandard.co.za.



ON THE INTERNATIONAL SCENE...

THE TECHNOLOGY OF PASTEURISATION AND ITS EFFECT ON THE MICROBIOLOGICAL AND NUTRITIONAL ASPECTS OF MILK

Bulletin of the IDF No. 496/ 2019

Pasteurisation of milk involves heating the milk to at least 72°C for 15 s or to 63°C for 30 min. Such heat treatment is necessary to reduce pathogenic bacteria to an acceptable safe level and reduce spoilage organisms, thus extending the shelf-life of the milk and improving public health. There are few adverse effects on the nutritional quality of the milk.

In this Bulletin, the technological process of pasteurisation is outlined, the microbiological aspects of the impact of pasteurisation on public health are explained and the scientific basis demonstrating that milk pasteurisation does not significantly impact the nutritional properties of milk are described. Thus, according to the currently available knowledge, drinking pasteurised milk is still the safest way to enjoy the health benefits of drinking milk. The focus of the

Bulletin is on pasteurised cow's milk for direct consumption. Milk from other animal species or milk intended for further processing have not been considered in this publication. Although homogenisation is now an integral part of the pasteurisation process in many regions, it has not been considered for the purposes of this Bulletin.

This Bulletin will be of value to the dairy sector and to a broader audience, as it provides an overview of the process of pasteurisation of milk, the advantages of milk pasteurisation from a public health perspective and demonstrates that milk pasteurisation has little impact on the nutritional properties of milk.

This bulletin is available from the Secretary: SA National Committee of the IDF, Mr Edu Roux at edu.roux@agriconnect.co.za, at a certain price.

Updated **IDF** guide to good **animal welfare** in **dairy production** released

At the World Organisation for Animal Health (OIE) Global Animal Welfare Forum in Paris, the International Dairy Federation (IDF) in collaboration with the OIE and the Food and Agriculture Organization of the United Nations (FAO), released the updated **IDF Guide to Good Animal Welfare in Dairy**

Production on 11 April 2019.

This new publication promotes the implementation of good animal welfare practices in dairy production on a global scale. It refers to key international standards and provides guidelines to help dairy



Challenges after the election

Roland Henwood, a political analyst from UP addressed the General Meeting on expectations after the May 2019 elections. He said the election had confirmed a preference for moderate politics instead of radicalism in South Africa.

However, less than 50% of eligible voters participated in the elections, which in practical terms, means that we have a minority government. The largest economic decline in 10 years was experienced in the first quarter of 2019, which could easily be repeated if policy message is not clear and positive, and if government performance is not decisive and convincing. It is important that a high level of trust be established among politicians and between government and all South Africans. Unfortunately, we have experienced a pattern of deepening fragmentation and alienation in South Africa due to irresponsible leadership. He emphasized that the country's wealth of educational resources was being wasted.

South Africa, he said, had the most sophisticated economy and infrastructure systems in Africa and this economy still ranked among the top 30 per cent of global

economies, but was sliding back at a rapid rate. The economy had the potential for resilience, to reverse the trend, but human and other resources are wasted. He said expectations for the new government were high but should be realistic, as the scenario would not change overnight, especially as the economy suffered from corruption, the ANC was still divided and policy problems existed.

Roland concluded by saying that South Africa had lost its position as the "automatic" voice and natural leader of Africa and that globally, our country was not taken seriously. About 15 years ago, South Africa had had a reserved seat in the G7 summit, whereas we were no longer even invited. Instead, Nigeria was invited. Therefore, good governance and execution were key to a growth path. In too many instances, the political will was not there to take basic decisions which were obviously required and not difficult to implement.

farmers and milk processors interpret and implement them based on scientific evidence and expertise. Importantly, it identifies five Action Areas to be considered when developing and implementing quality management systems for dairy animal welfare, including stockmanship, feed and water, physical environment, husbandry practices and health management.

"Farmers know that healthy cows produce quality milk, and the dairy sector is wholly

committed to developing progressive animal health and welfare initiatives that provide safe, nutritious and secure dairy products to global consumers," said Caroline Emond, Director General of IDF. "We are proud to contribute to the development of animal welfare expertise that brings benefits to animals, farmers and society."

The guide was disseminated by Milk SA to industry participants during April 2019 and is still available on request.

MILK SA members updated with R&D activities of MILK SA

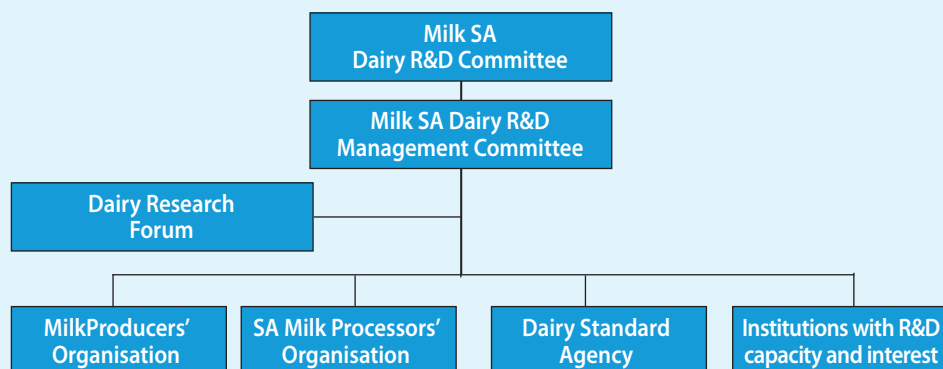
Dr Heinz Meissner, R&D Programme Manager of Milk SA, delivered a presentation at the General Meeting in June. Milk SA approached R&D in a structured way, where ample opportunity existed for MPO, SAMPRO, DSA and other institutions to identify and table motivated research opportunities to Milk SA. If required, project ideas or applications are referred to expert groups which Milk SA established in respect of all relevant R&D disciplines.

Guidance and assistance are provided in a number of areas such as disease monitoring, biofilms, listeria, composition and nutraceuticals, GHG reduction, Carbon sequestration, water use efficiency, conservation agriculture and soil health. Dr Meissner questioned the level of awareness and knowledge amongst milk producers,

processors and other role-players about their responsibilities in this regard.

Programmes with which good progress had been shown, are in respect of mastitis management (i.a. management control, alternative treatment other than AMR & genomics), liver fluke (i.a. management control & alternatives to drugs) genetic performance measurement and milk flocculation. Dr Meissner said that selection for efficiency of milk production should get the required attention in genomic programmes.

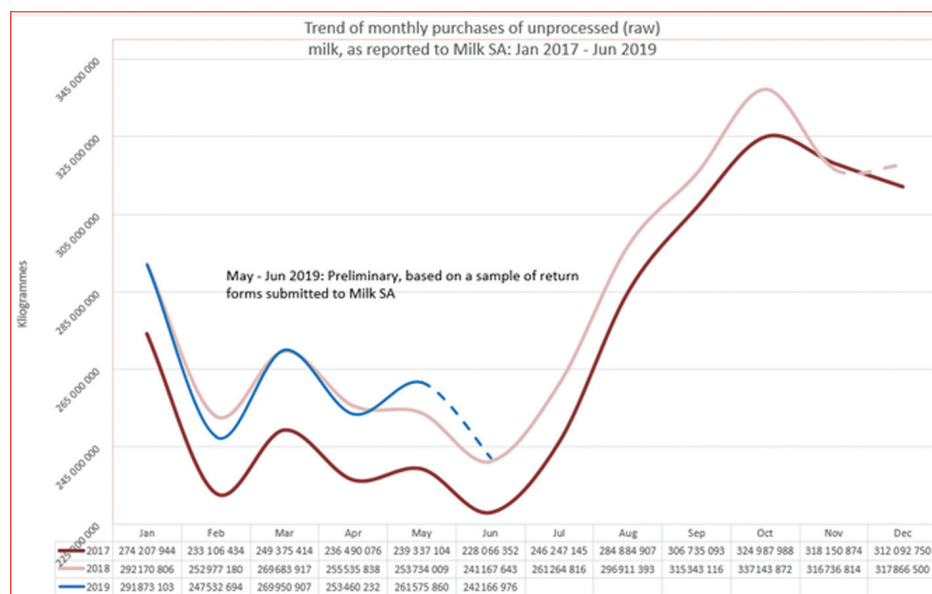
Dr Meissner played a huge role in the quantification of GHG emissions of the national herd in South Africa which was registered with the Department of Environmental Affairs, which reports to the international panel for climate change. Milk SA will soon update such figures.



TRENDS OF MONTHLY UNPROCESSED (RAW) MILK PURCHASES IN THE RSA: JAN 2017 TO JUNE 2019

The preliminary figure for Jun 2019 shows a 0,41% *higher* milk purchase volume than the amount bought in June 2018. An amount of 242 166 976 kg is the preliminary milk purchase figure for June 2019.

The total raw milk purchases for Jan - June 2019 is 1 566 559 771 kg, which is 0,08% *higher* than the corresponding period in 2018 and 7,26% *higher* than the corresponding period in 2017.



Milk SA takes no responsibility for the accuracy of this information which is intended to provide market signals only, and Milk SA indemnifies itself against any actions based on this information.

- **Source:** Milk SA Statistics (from monthly return forms submitted to Milk SA by ± 330 role-players).
- Each year's total figures are reviewed in March of the following year.

THE ROLE OF **RUMINANTS** IN SUSTAINABLE DIETS



After having attended a conference on “The Role of Ruminants in Sustainable Diets” in Brussels in June 2019, **Dr Colin Ohlhoff** - a member of Milk SA's Dairy Research and Development Committee – reports as follows:

- There was a strong focus on the positive contribution of livestock agriculture on both the environment and future global food security. The rapidly growing human population and estimations of where food demand would be within 30 years formed a focal point and two questions emerged, namely: How are we going to feed the world and are we able to eat our way out of climate change?
- A series of global epidemiological studies showed compelling evidence that dairy and meat consumption are an important part of a healthy diet. Natural foods containing saturated fat, such as dairy and milk, also contain a number of key nutrients including protein, zinc, magnesium, retinol, calcium, vitamin D and selenium. A balanced, healthy diet which comprises a higher intake of fruit, nuts, legumes, fish, dairy and meat could be linked with lower mortality and Cardio-vascular Disease globally. Although there are still limitations to this work, it does contradict various global dietary guidelines which oppose total fats.
- Presentations on Greenhouse Gas (GHG) Emissions revealed that statistics for the United States depict that agriculture contributes approximately 9% to the national GHG emissions, while industry (including electricity generation and transportation), which are dependent on fossil fuels, contribute a combined 77% of total emissions.
- From a land-use and biodiversity perspective, ruminants can be regarded as well-integrated into the global food system and attention should be drawn to the circular role they fulfil. Ruminants were described as near perfect examples of recycling and reuse, as approximately 70% of animal feed is not edible as human food. Furthermore, ruminants contribute to food security through the grazing of marginal land which is typically unsuited to the cultivation of plant products for human consumption.