



MilkSA - Dairy Standard Agency Programme, 2022

(PRJ-0317-2022)

Dairy Standard Agency

Quarter 4 2022/2022 (October 2022 till December 2022)

Project goals

Goal 1 - National monitoring of milk and other dairy products in collaboration with Health Authorities

Achievements

The sample run activities (cycle 82) were completed as per schedule and the number of samples per product are indicated in Table 1 below. The product scope for C82 was Milk (Raw and Pasteurised), UHT, Sterilised Milk, Flavoured Milk, Sweetened Condensed Milk, Evaporated Milk, Dairy Powder, Dairy Dessert.

Table 1 Number of samples per product collected and analysed

| | | |
|------------------------|-----------------------------|--------------|
| Fresh Milk (A-D) | 194 | Total |
| Products total (E - M) | 266 | 460 |
| | | |
| A | Milk (Packed Pasteurised) | 107 |
| B | Milk (Packed Unpasteurised) | 4 |
| C | Milk (Bulk Pasteurised) | 29 |
| D | Milk (Bulk Unpasteurised) | 54 |
| E | UHT Milk | 82 |
| F | Sterilised Milk | 8 |
| G | Flavoured Milk | 56 |
| H | Sweetened Condensed Milk | 33 |
| I | Evaporated Milk | 9 |
| J | Dairy powder | 15 |
| K | Dairy Dessert | 63 |

During Cycle 82 7 Metropolitan municipalities, 12 district municipalities and 45 local municipalities participated in the sampling runs, representing all provinces.

Samples were submitted to DSA Laboratory Services per standard procedure and the results of milk and other dairy products were benchmarked against food safety, compositional and trade metrology standards as respectively gazetted under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972), Agricultural Product Standards Act, 1990 (Act 119 of 1990) and the Legal Metrology Act, 2014, (Act 9 of 2014).

Food safety non-conforming results obtained were assessed and communicated to the participating municipal health authorities for further action. Contact details of participating authorities as well as processors were updated as per standard procedure.

DSA, in terms of its project protocol and relationships with the relevant authorities (see project goal 6), continued to liaise with the relevant law enforcement bodies, providing support through dairy technical information and guideline documents to limit the sale of non-conforming products.

No Non-achievements / underperformance has been reported

Goal 2 - Handling of quality problems in respect of product compliance with legal standards

Achievements

No formal complaints were received during the fourth quarter of 2022.

No Non-achievements / underperformance has been reported

Goal 3 - Special investigations

Achievements

3.1 Aflatoxin M1

A national survey was conducted on the presence of Aflatoxin M1 in fresh milk sold in South Africa during the fourth quarter of 2022 (C82). A total number of 194 milk samples were tested of which 28.84% tested positive for the presence of Aflatoxin M1. 32.45% of the positive samples test at levels <50ppt and 67.55% of the positive samples levels of Aflatoxin present exceeded the maximum residue limit of >50 ppt.

77 positive samples out of 267 samples tested as follow:

>50 ppt = 52 samples
<50 ppt = 25 samples

3.2 Psychrotrophs in milk

Milk SA project: Evaluation and validation of methods for the detection of psychrotolerant bacteria and proteolytic enzymes in milk. The project was commissioned during the second quarter. Assistance was rendered by DSA in the Milk SA Research and Development Project (Milk SA R&D) relating to the development of a rapid test method for detection of psychrotrophic organisms in raw milk registered by the University of the Free State. A test method was developed and DSA laboratory services are in the process of sourcing equipment and the establishment of the method as part of the ongoing effort to broaden the services provided to the industry and the projects of Milk SA.

3.3 Addition of milk powder to various types of milk (Pasteurised, ESL, UHT and sterilised milk)

Work on this project has been initiated in 2019 and outsourced to an external specialist laboratory to develop the analytical method currently not in existence.

Internal trials were run using upgraded adulteration detection software installed on the Milkoscan to detect

the addition of various types of milk powder to different types of milk. Data analyses and interpretation thereof will be finalised during the first half of 2023.

No Non-achievements / underperformance has been reported

Goal 4 - Milk and other dairy product risk identification

Achievements

The DSA national dairy monitoring program provides for the sampling of milk categories namely packed pasteurised and unpasteurised milk and retail bulk pasteurised and unpasteurised milk as well as other dairy products. Relevant information regarding food safety and compositional standards for milk, and other dairy products were communicated to the relevant dairy industry members as tests were completed.

4.1 Reporting of results to Health Authorities

Reports on non-conforming results were forwarded to the respective government departments at the end of each cycle. Each participating municipality received a quarterly report on the analysis done of samples submitted. Non-conforming processors as well as processors whose contact details were verified and who requested to receive test results were provided with individual test reports. The total cycle reports forwarded to health authorities for C82 are indicated in Table 2.

Table 2 Total cycle reports

| Province | Health Authority offices |
|--------------|--------------------------|
| MP | 11 |
| LP | 11 |
| WC | 8 |
| NW | 16 |
| GA | 13 |
| FS | 9 |
| NC | 2 |
| EC | 7 |
| KZN | 12 |
| TOTAL | 88 |

4.2 Management information system (MIS) upgrading

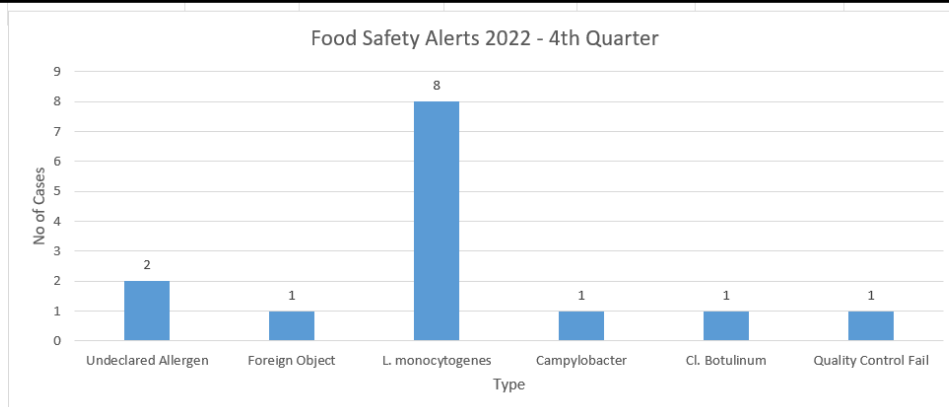
- The Report Server to be extended to include all DSA reporting requirements finalised:
 - o Internal Reports currently done through the MIS system;
 - o External Reports such as auditing, consulting etc.;
 - o CSV export file amendments.

- Setup of https web-based platform for Reporting service to clients completed.
- Migrations of MIS user interface to updated DotNet6 version completed.

4.3 National and international food safety and recall monitoring

National and international food safety alerts during 2022 were monitored. Approximately 20 national and international websites were monitored on a weekly basis for possible food safety risks relating to dairy during this year, that could have a public health impact on South African consumers. On average 50 international alert are received of which 10 was dairy related. No further actions were required based on the monitoring activities.

| FOOD SAFETY ALERTS - 2022 - FOURTH QUARTER | | | | | | | | |
|--|---------------------|----------------|-------------------------|----------------------|----------------------|----------------------|-----------------------|------------------------------|
| Total # of Reported Cases | Undeclared Allergen | Foreign Object | <i>L. monocytogenes</i> | <i>Campylobacter</i> | <i>Cl. Botulinum</i> | Quality Control Fail | <i>Crypto. Parvum</i> | <i>Cronobacter sakazakii</i> |
| 17 | 2 | 1 | 8 | 1 | 1 | 1 | 1 | 2 |



No Non-achievements / underperformance has been reported

Goal 5 - Remedial programs with producers, processors and distributors

Achievements

The perishability of most dairy products requires prompt action regarding follow-up of non-conforming products as to ensure appropriate action by the parties involved. The data obtained from project 1, were used and effectively communicated to industry members. EHPs were also requested to communicate all test results to relevant stakeholders in a confidential manner.

DSA technical personnel visited the respective processors, producer/distributors and retailers (milk shops) to discuss the test results (already received) and to assist with possible causes of the non-conformances and give recommendations to rectify the non-conformances.

In case of no non-conformances courtesy visits were paid to establish and build the role of DSA in a supporting function.

During the fourth quarter of 2022 (cycle 82) sample runs, 60 visits were paid to processors, PD's and milk shops in 4 provinces (Table 3).

DSA technical personnel also visited the associated EHPs from the respective government departments of the processors, producers/distributors and retailers (milk shops) visited to give support and guidance in the execution of project 1.

Table 3 Visits were paid to processors, PD's and milk shops

| Province | Companies visited | E-mails | DSA further assistance provided |
|---------------|-------------------|---------|---------------------------------|
| Gauteng | 5 | 37 | 20 |
| Mpumalanga | 0 | 10 | 0 |
| Free State | 32 | 14 | 6 |
| Northwest | 15 | 14 | 3 |
| Northern Cape | 0 | 0 | 0 |
| Western Cape | 0 | 46 | 2 |
| Eastern Cape | EHP's visited | 17 | 3 |
| Limpopo | 8 | 23 | 9 |
| KwaZulu Natal | 0 | 12 | 0 |

As part of the remedial action program, assistance was given to processors on the verification of compliance of product labels against national standards. 19 company's dairy product labels were reviewed and comprehensive feedback reports on each label were communicated to processors.

No Non-achievements / underperformance has been reported

Goal 6 - Communication with the authorities and other organisations

Achievements

6.1 Department of Health: Directorate Food Control

DSA in a supportive role, assisted the industry members with queries relating to food labelling and, dairy food safety requirements, as well as dairy technical matters.

Technical consultation with the directorate in respect of Codex Alimentarius matters relating processing aids, food additives, preservatives, front of pack labelling on dairy products and current Regulations Relating to Labelling of Foodstuff were on going.

6.2 Municipal health authorities

Communication with the municipal health authorities focused on interpretation of food safety legislation and elements of law enforcement as per the health regulations under the Foodstuffs, Cosmetics and Disinfectants Act were ongoing.

6.3 Department of Agriculture, Land Reform and Rural Development (DALRRD)

i. Directorate: Inspection Services (IS)

Cycle results of the DSA monitoring programmes regarding infringements in terms of the regulations relating to dairy and imitation dairy products (because of the DSA mandate) were restricted to communication with the Directorate: Food Safety and Quality Assurance. Following the revocation of the appointment of the assignee a meeting was held between the Directorates Inspectorate an Food Safety Quality Assurance to revive the previous arrangement whereby DSA will provide all non-compliant results to designated personnel for appropriate action against contraveners of the Act and standards. This meeting took place in December 2022 and was successful. The process of formal notification will start during the first quarter of 2023.

ii. Directorate: Food Safety and Quality Assurance (FSQA):

Communication with FSQA regarding dairy product compositional matters and the interpretation of the regulations relating to dairy and imitation dairy products continued. Formal communication with the FSQA continued regarding the revision of the latest R1510 of 2019 - Regulations relating to dairy and imitation dairy products, the industry process to review R1510/2019, the Agricultural Product Standards Amendment Bill, Codex Standards relating to dairy as well as EPA agreements on Geographical Indicators with specific reference to Feta.

6.4 National Regulator for Compulsory Specifications (NRCS): Legal Metrology

Standard procedure provides for a quarterly report regarding metrology infringements to the Senior Manager, Inspections: Legal Metrology of NRCS. No formal complaints were lodged with NRCS during the 4th quarter.

6.5 South African Bureau of Standards (SABS)

No formal communication took place except for the postponement of the SABS TC 34/05 scheduled meeting to 2023 and notifications and voting ballots on ISO documents.

6.6 Communication with other organisations

6.6.1 Milk SA, MPO and SAMPRO

DSA interacted on a regular basis with the project managers of the Milk SA's Consumer Education Project, SAMPRO, MPO, Coordinating Committee of Milk SA (DSA, CEP and R&D project of Milk SA). The Milk SA Dairy R&D Committee (DRDC) and management committee meeting were attended, and Sub-committee: Sustainability in respect of animal welfare.

Milk SA matters were attended to in respect of industry queries as well as dairy technical issues. The Milk SA coordinating Committee meeting was attended during the fourth quarter of 2022.

Sampro – DSA support services were regularly rendered to Sampro members as was the case with all Milk SA levy payers.

MPO – participation in the assessment of dairy farms as part of the Nedbank/MPO Stewardship programme.

Milk SA Research and Development – The management committee and general meetings were attended during the fourth quarter as well as participation in strategic planning sessions relating to DRDC research projects in conjunction with the DRDC project manager.

6.6.2 Consumer Goods Council of South Africa: Food Safety Initiative (CGCSA: FSI)

DSA as member of the Food Safety Initiative (FSI) interacted on a regular basis with the management of FSI regarding matters relating to:

Agricultural Product Standards Act and Amendment Bill, Foodstuffs Cosmetics and Disinfectants Act (developments regarding the front-of-pack labelling and healthy food options programme) as well as food loss and waste program, together with the Milk SA Consumer Education Project.

6.6.3 European Hygienic Engineering & Design Group (EHEDG)

DSA is a member of the South African steering committee and liaised with EHEDG regarding webinar participation by industry in 2023.

6.6.4 International Dairy Federation (IDF)

DSA managing director attended the business meetings of the IDF as well as World Dairy Summit (WDS) from 9 to 15 September in Greater Noida, Delhi. Since the WDS a significant amount of work via the action teams of the respective standing committees were actioned leading to increase in correspondence and comments. Participation continues in the various action teams with specific reference to Font of Pact Nutritional Labelling, Good Agricultural Practices, Food additives and draft comments on Codex papers. Electronic meetings were attended where possible as well as participation as member in the SC Animal Welfare new work item: Guidelines for a novel approach to manage milk

quality on farm.

6.6.5 South Africa National Consumer Union (SANCU)

DSA is a member of SANCU and presented on 28 September 2022 at the SANCU's AGM on the topic "A regulatory perspective on plant-based products". No general meetings were attended during the fourth quarter.

6.6.6 South African Society of Dairy Technology (SASDT)

DSA managing director and staff members serve on the management committees of the Northern and Western region. Where possible SASDT management and national strategic planning meetings were actively participated in during the fourth quarter.

6.6.7 Tertiary institutions

DSA serves as a member of the Advisory Boards of the Departments of Environmental Health of the Tshwane University of Technology (TUT) as well as Nelson Mandela Metropolitan University. The purpose of the advisory boards is to give industry inputs and assist the universities with the development of course material for environmental health practitioners (EHPs). Meetings were attended to by the designated project manager.

No Non-achievements / underperformance has been reported

Goal 7 - Liaison on legislation with authorities

Achievements

DSA continued to liaise with the authorities regarding the following legislation and standards:

7.1 Department of Health: Directorate: Food Control

Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972)

Revision of the regulations relating to milk and dairy products (R1555/1997). The revision work is still in progress because of the priority work of the Milk SA workgroup finalising the regulations relating to product composition of DALRRD as well as other related regulatory work.

7.2 Department of Agriculture Land Reform and Rural Development (DALRRD)

Agricultural Product Standards Act, 1990 (Act 119 of 1990)

Revision of the regulations relating to the classification, packing and marking of dairy products and imitation dairy products intended for sale in the Republic of South Africa (R1510/2019). After comments received from industry, same were collated and dealt with by the technical work group.

Liaison with DALRRD continued in respect of violations of geographical indications relating to Feta by South African manufacturers as well as the establishment of an effective working relationship following the revocation of the appointment of the assignee.

7.3 South African National Standards (SABS) and African Standardisation Organisation (ARSO)

No SABS meetings were attended during the fourth quarter other than monthly ARSO workgroups 1, 2 and 3 as well as plenary meetings, with the assistance of the DSA appointed contractor.

7.4 International Dairy Federation (IDF), Codex Alimentarius and International Organization for Standardization (ISO) and European Union (EU)

As representative of the SANCIDF, the managing director of DSA participated in the IDF communication and commented where applicable on standing committee and respective action team activities.

IDF comments on 2022 Codex preparatory meetings were shared with the Codex Contact Point office for South Africa, situated at the office of the Department of Health.

7.5 Dairy Standard Agency Technical Committee (DSA TC)

Assistance by the DSA TC in respect of R1510/2019 continued during the fourth quarter. The committee work focussed on establishment of validated test methods for the accelerated determination of numbers and activities of psychrotolerant bacteria in milk.

No Non-achievements / underperformance has been reported

Goal 8 - Information and education

Achievements

DSA presents information sessions based on the DSA Codes of Practice and related guideline materials to professional environmental health practitioners (EHPs) as well as student EHPs, and other professions such as veterinary and B.Sc. Agric students.

On the **11th of October 2022** the Dairy Standard Agency presented a lecture on Biosecurity & Welfare in the Dairy Industry at the **University of Stellenbosch** where **28 students** attended the lecture.

Dairy Information workshops for professional EHPs were presented at the respective municipalities as follow:

12 October 2022 at **Waterberg District Municipality** with **19** attendees

1 November 2022 at **Thabo Mofutsanyane District Municipality** with **10** attendees

The **ninth webinar**, on **11 October 2022** was attended by **63 people** and the topic was **“Escherichia Coli from a One Health perspective”**.

The **4th quarter of 2022** was concluded with the final webinar on **“Pasteurisation to the next level”** that was presented on the **15th of November 2022** and attended by **78 people**.

Recordings of all the webinars on the Dairy Standard Agency’s website is useful to re-cap or for interested parties not able to attend the webinars.

No Non-achievements / underperformance has been reported

Goal 9 - Media communication

Achievements

DSA completed its contractual responsibilities for 2022 with Agri Connect and Plaas Media. Four (4) advertorials/advertisements and two articles relating to DSA services to the industry and other were published in the Dairy Mail and Plaas Media. DSA advertising was also done by means of the last annual scheduled webinars and DSA website.

No Non-achievements / underperformance has been reported

Goal 10 - Development of guideline documentation

Achievements

Following the successful implementation of the Code of Practice for Milk Producers (COP), the work on the development of a generic documentation system for milk producers, required for the successful implementation of a Good Agricultural Practice (GAP) system on farms and aligned with the COP (focussing on food safety, animal welfare, environmental sustainability and biosecurity) was initiated and the target date for completion the draft was reached by the end the third quarter. The first draft was completed during the fourth quarter and completion was postponed to the first quarter of 2023 to due increase of workload of related projects.

No Non-achievements / underperformance has been reported

Goal 11 - To successfully manage the Regulations and Standards Project of Milk SA which is registered as an additional project with Milk SA

Achievements

A sepearte report is compiled to report on the Reugulation and Standards Project of Milk SA

No Non-achievements / underperformance has been reported

Income and expenditure statement

| | |
|------------------------------------|---------------------------------------|
| Income and expenditure statement | PRJ-0317 Dec 2022.pdf |
| Unnecessary spending during period | No |

Popular Report

[DSA Popular Report Oct to Dec 2022.pdf](#)

Additional documentation

No file has been uploaded

Statement

| | |
|---|-----|
| Levy funds were applied only for the purposes stated in the contract | Yes |
| Levy funds were applied in an appropriate and accountable manner | Yes |
| Sufficient management and internal control systems were in place to adequately control the project and accurately account for the project expenditure | Yes |
| The information provided in the report is correct | Yes |