



## **Co-ordination, Support and Promotion of Needs-driven R&D development in the SA dairy industry**

(PRJ-0059-2014)

**Milk South Africa**

**Quarter 4 2014** (October 2014 till December 2014)

### **Project goals**

**Goal 1 - To accumulate and publish existing domestic and international scientific knowledge of applicable and practical value to enhance the industry.**

**Achievements** *Tasks: i. Updating information on the website from the seven most relevant international scientific journals, as previously identified. Fifty research titles per month will be added. ii. The listing of publications and articles of a popular-scientific nature which would be of functional value to the South African dairy industry. iii. Research results of importance to the industry will be sourced from local and international sources and interpreted and popularized on the website monthly under the heading "The Research Column". One (1) article per month will be added to The Research Column. A nutshell interpretation will also be extracted from the aforementioned (Tasks i to iii), for publication in for example the Milk Essay and Milk SA's website. iv. The R & D capacities in SA, their publications and the work that they are busy with will be updated biannually on the website. This will be done in July before the Forum meetings. (This task will not be executed in 2014, as it was done in 2013).*

Task i: Updating information of international scientific journals: Target 50 per month. The information of the Journals of Dairy Science and Dairy Research of 2011 have been updated. The total was 173 for the three months; target was met.

Task ii: The listing of publications with a functional value to the industry: This is reported on the website under the Heading "Dairy R & D in SA". Six publications were interpreted and put on the website; target was met. The six publications are attached.

Task iii: Research results of an international origin compiled under "The Research Column": Target is one per month. In the period six publications were added; target met. The six publications are attached.

Task iv: R & D capacities in the country listed. This is done every two years; 2015 is the next scheduled date.

**No Non-achievements / underperformance has been reported**

**Goal 2 - To limit research fragmentation and encourage cooperation between R & D capacities towards achieving the strategic goals of the industry.**

**Achievements** *Tasks: i. To communicate with R&D institutions in South Africa to promote R&D in line with the strategic direction of Milk SA and to promote appropriate interaction and co-operation between the relevant institutions. ii. Co-operative Research Networks (CRN's) and the*

*development thereof will be encouraged to increase the chance of project funding and to ensure anticipated deliverables and outcomes - as well as to see how the transformation objectives can best be achieved in so far as R & D can support or add value. iii. The annual R & D Forum where the most prominent researchers and industry leaders will discuss strategic direction and relevant research results will be arranged in the second half of 2014.*

Task i: To communicate with R & D institutions. The M.o.A with the KZN Department of Agriculture and Rural Development has been finalized and is scheduled to be signed in the presence of the MEC in January 2015. Although there is still delay with finalizing the M.o.A with the Eastern Cape Department, the process of achieving the commitment of the three coastal provinces within the network provided by SESCORDER is now complete. This is a tremendous step forward to co-ordinating the R & D requirements and identified projects of the region, and will facilitate the work that needs to be done on both experimental stations and farms

Task ii: Encouragement of CRN's. Contact between the research teams responsible for the liver fluke and mastitis projects has been facilitated. For example, Dr Martin van der Leek of UP, Onderstepoort, who will be the project leader for the mastitis survey and identification of pathogens on farms, accompanied the CEO and the Program Manager in a visit to UKZN to meet the group of Prof Mark Laing who will be responsible to find suitable bacteriophages as natural enemies to the prominent mastitis pathogens. Thereby, a position of trust and a co-operative spirit to support each other have been established, which should benefit the mastitis program. A further example is that exploratory discussions were arranged between Dr Danie Odendaal of the National Disease Monitoring project and Dr Japie van der Westhuizen of Logix, to establish the possibility of feeding in the disease results and recommendations in the management program of the Logix. It appears that it may require only an interphase modification at comparatively low cost, but with substantial additional benefits to the industry.

Task iii. The R & D Forum. This will again be arranged for 2015 and therefore there is nothing to report.

## ***No Non-achievements / underperformance has been reported***

### **Goal 3 - To guide the R & D programme by means of effective structural arrangements, administration and fund sourcing.**

**Achievements** *Tasks: i. Chair the Research Project Evaluation Committee of Milk SA (RPEC). ii. The administration of R & D requires guidance on structural arrangements, evaluation of project proposals and reports, negotiations on IP, contracts and publication of results. iii. Submission of project proposals will be facilitated by the office of Milk SA; proposals will be evaluated by the RPEC and recommended by the RPEC to the Milk SA Board of Directors for approval and possible financial support. iv. R & D institutions will be guided through the required processes and contracts be concluded with successful applicants. v. Milk SA's funds for R&D are limited. Sourcing from other institutions is possible, but the process and procedures differ and therefore guidance to the researchers and Milk SA is required. This will be done for approved projects.*

Task i: Chair the RPEC. A Meeting was held on 20 October 2014; Minutes attached. The primary discussions were on aspects of improvement, including the budgets, and making recommendations to the projects concerned with liver fluke and mastitis. The second Meeting of the Producers Work Group was also held, on 18 November, where the Program Manager reported on progress made on the projects identified; Minutes attached.

Task ii: Guidance on structural arrangements. Structures are considered in place. The respective projects were evaluated at the RPEC Meeting (see attachment) and the recommendations discussed with the Project Leaders.

Task iii: Submission of project proposals. An open invitation to research institutions for new submissions were sent out by the CEO in November. In addition, a Meeting was arranged to establish whether the National Disease Monitoring project cannot be linked with the Logix system, as this would add considerable value to the information and management support system. It does appear that an interface needs to be programmed at little cost. The idea will be pursued further early in 2015. A Genomics-based selection Program has been submitted by Stud Book and UP for possible funding by the Technology Innovation Agency (outside funder). Milk SA was requested to support (no financial implications), which was done, provided that a

genomic investigation for possible marker(s) for mastitis control is included. This has been done, and if successful, the project could add a further dimension to the mastitis program

Task iv: R & D institutions to be guided. Several Meetings were held and correspondence with project leaders conducted to guide with the process and the budgets negotiated. These were finalized with the liver fluke and mastitis projects, but the contracts still need to be compiled and signed. It is envisaged that these projects can be initiated early in 2015. For the milk flocculation program, submissions are expected in January 2015.

Task v: Fund sourcing. This was not necessary as Milk SA's funds for commitments in 2015 are sufficient. However, the bacteriophage project of the mastitis program may be co-funded by Plant health Products (PTY) LTD in KZN. This will be followed-up soon.

## **No Non-achievements / underperformance has been reported**

**Goal 4 - To participate in the Water Research Commission's study on water and wastewater management in the South African dairy industry in which the Programme Manager acts as evaluator on behalf of the SA dairy industry; and to continue to support an MBA student with her dissertation titled "The quantificati**

**Achievements** *Tasks: i. Coach the MBA student in the approach to and execution of the dissertation. ii. To provide input as required by the Water Research Commission and its contractor, the University of KwaZulu-Natal.*

Task i: Coach the MBA student. The study has not yet progressed to the stage of compilation of a dissertation.

Task ii: Provide input to the WRC and UKZN: Nothing to report. Date of progress reporting is normally June-July.

## **No Non-achievements / underperformance has been reported**

**Goal 5 - Reporting to and from the International Dairy Federation (IDF) on Sustainability and the Environment, including the activities of the Scientific Committee on the Environment (SCENV) and the South African dairy industry's commitments to the Global Dairy Agenda for Action (GDAA).**

**Achievements** *i. Provide South African water footprint data as obtained from the initiative under 3.4 and carbon footprint data obtained from the National R&D Programme on Climate Change to the IDF (in accordance with the IDF-LCA Methodology). ii. Promote mitigation activities in the South African dairy supply chain through communication and supporting articles (e.g. as under Task 3.1 iii). iii Report to and from the IDF on R & D and providing input into key documents on GHG emissions and environmental sustainability in the dairy supply chain (ad hoc). iv. IDF related information relating to R&D - including Sustainability and the Environment will constantly be scrutinized and taken care of as required.*

Task i: SA water footprint and carbon footprint data. The water footprint data is not yet available. The carbon footprint data have been submitted to the IDF, but no response has been received as yet. This may be due to Dr Delanie Kellon's change in duties and responsibilities.

### **Non-achievements / underperformance**

The IDF-SCENV is often held by teleconference. Due to short notices, it is very difficult to attend.

### **Reasons for non-achievements / underperformance**

Short notice

### **Planned remedies for non-achievements / underperformance**

Will follow up with the organisers.

Task ii: Promote mitigation activities. The October (2) 2014 issue of "The Research column" (attached) deals with heat stress and the December (2) issue with methane mitigation. In addition, the 2014-10-19 edition of "Dairy R & D in SA" (attached) deals with water management on farms.

Task iii: Providing input to IDF documents on GHG emissions and environmental sustainability. There is still debate as to the best way of calculating the carbon footprint of dairy product manufacturing. The Program Manager participated in this debate. Input was also given into the development of the 2014 FAO, IDF, IFCN document: "World mapping of animal feeding systems in the dairy sector", as it applies to the South African situation, the IDF's Strategic Review on current and future work and the IDF HLPE Water and Food Security draft document. As an example the comments of the Program Manager on the IDF draft Livestock Sector statement to ICN2 2014-11-04 are in red (attached). Ad hoc: On request of Mr Bertus de Jongh opinions were also supplied to the Greenflex study on milk sustainability issues in SA by a French group (attached).

Task iv: IDF related information relating to R & D. Nothing came up in the reporting period.

## Income and expenditure statement

Income and expenditure statement	<a href="#">Budget.docx</a>
Unnecessary spending during period	No

## Popular Report

No file has been uploaded

## Additional documentation

[MSA DAIRY R & D IN SA 2014-10-10.docx](#)  
[MSA DAIRY R & D IN SA 2014-10-19.docx](#)  
[MSA DAIRY R & D IN SA 2014-11-01.docx](#)  
[MSA DAIRY R & D IN SA 2014-11-19.docx](#)  
[MSA DAIRY R & D IN SA 2014-11-20.docx](#)  
[MSA DAIRY R & D IN SA 2014-12-13.docx](#)  
[MSA THE RESEARCH COLUMN Oct 2014.docx](#)  
[MSA THE RESEARCH COLUMN Oct 2014\(2\).docx](#)  
[MSA THE RESEARCH COLUMN Nov 2014.docx](#)  
[MSA THE RESEARCH COLUMN Nov 2014\(2\).docx](#)  
[MSA THE RESEARCH COLUMN Dec 2014 \(2\).docx](#)  
[MSA THE RESEARCH COLUMN Dec 2014\(2\).docx](#)  
[MSA NOTNAV065 Minutes RPEC 2014 10 20 \(2\).docx](#)  
[MSA SAKNAV053 Sakelys Produsente-RD WG - 2014 10 20.docx](#)  
[IDF Comments-on-ICN2-Draft-Framework-for-Action-2014-08-14.pdf](#)  
[Interview on milk sustainability stakes - Country - Category - Date - 2.xlsx](#)

## Statement

Levy funds were applied only for the purposes stated in the contract	Yes
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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