



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

(PRJ-0059-2014)

**Milk South Africa**

**Quarter 2 2014/2014** (April 2014 till June 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 on the website - target 50 research titles per month.

A total of 151 articles were sourced from April to June 2014. Target was met.

Task ii. Listing of publications of a functional value.

Regular scans are done and put on the website under the title: "Dairy R & D in SA". For the reporting period six articles were sourced. Target was met.

Task iii. Results of importance interpreted in "The Research column", one per month.

Three contributions were made, one per month from April to June 2014 - target met.

### **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*

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

Task iii: The Forum Meeting will not be staged as progress on approved projects as yet cannot be reported and because the budget for the R &

*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 and promote co-operation.

The MoA with the Western Cape Department of Agriculture (WCDA) has been completed. A similar one is still being negotiated with The Eastern Cape Department of Rural Affairs

and Agrarian Research (ECDRA&AR). With regard to the KZN Department of Agriculture and Social Development (KZNDASD), discussions are in progress and it was agreed that a MoA is the way forward. The format, however may be different than those of the other two provinces as a MoA between the KZN MPO and the KZNDASD is already functioning.

The three departments are also in favour of working together and with relevant tertiary institutions under the guidance of the Program Manager R & D to better serve the interests of the south-eastern seaboard pasture-based dairy systems, the vehicle being the South-Eastern Seaboard Consortium for Research in Dairying (SESCORD) arrangement. To that effect a T.o.R. for SESCORD has been developed. Amadlelo Agri, the University of Fort Hare and four commercial farmers of the region are also participating. The farmers are Kassie Kasselmann of van Greunen Boerdery, George; Nigel Lok, Tsitsikamma; Conrad Dreyer, Humansdorp and Tom Turner, Nottingham Road. It is foreseen that other farmers and study groups in future may also want to join the SESCORD initiative. What is important in the mentioned activities is that all institutions endorsed the goals and strategic direction of Milk SA. An outcome of the negotiations with the WCDA is the formation of a farmer advisory group for R & D in the region to feed in R & D requirements to the WCDA and Milk SA R & D structures. This will be encouraged in other regions as well. A further outcome is that the Program Manager R & D represents Milk SA and advises the WCDA's Research Forum, the Meetings of which are regularly scheduled.

Task ii: The development of Co-operative Research Networks (CRN's) encouraged.

The MoA and SESCORD arrangements discussed under Task i serve as examples of how

CRN's are being promoted. For those researchers who submitted project proposals that are considered promising by the Research Project Evaluation Committee (RPEC), co-operation with other expertise and institutions are encouraged. The value of the approach is that the RPEC wants to ensure that the best possible expertise and capacities are involved with the project, secondly, that as many students as possible can be trained to build capacity and serve the interest of transformation and thirdly, that it will improve the chance of finding external funding if the amount which can be allocated by Milk SA is insufficient.

D Program had to be reduced as instructed by the Board.

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

See above.

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

Staging the R & D Forum will again be considered in 2015

Task iii: The annual R & D Forum scheduled for August 2014  
The Forum will not be arranged

### **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: Program Manager R & D chairs the RPEC

The RPEC has been very active in the first quarter, with Meetings on 2014/02/06 and 2014/03/31, which were preceded by Work Group Meetings. The Work Group serves as an Executive of the RPEC and deals in-depth with R & D structural and project relevant issues, the outcomes and recommendations of which are then relayed to the RPEC Meeting. The RPEC did not meet in the reporting period as project proposals were prepared (see Task iii). Progress was however reported at the R & D Advisory Committee Meeting of 2014/05/12, the Board Meeting of 2014/06/03 and the Members Meeting of 2014/06/04.

Task ii: Guidance to the administration of R & D.

This is done on a continuous basis. Nothing specifically came up in the reporting period.

Task iii: Submission and evaluation of project proposals

In the reporting period the second progress report of the project: the "National Disease Monitoring and Extension System" was evaluated and a new contract finalised for the remainder of the fin year. Four subjects have been identified by producers as being of importance, possibly requiring research, and submitted to the RPEC through the Producers Work Group:

- The prevalence and treatment of liver fluke on pasture
- Resistance to available antibiotics in lactating cows with mastitis
- The prevalence of and reasons for milk flocculation after heat treatment in certain geographical areas

- The optimal combination of nitrogen-supplying crops on the same land for silage; the optimal combination of legumes with small grains such as wheat, triticale and oats, and as silage; and the control of weeds in these lands. [This subject is of importance to the Western Cape and Milk SA is only involved in kind or if expertise in the WCDA lacks].

The Board approved in principle that expertise groups can be approached to develop project proposals. Subsequently, the RPEC sent out Letters of Intent to prominent expertise who have responded with concept proposals for two of the subjects, namely: "The prevalence and treatment of liver fluke on pasture" (Dr Jan van Wyk of UP, Onderstepoort as Project Leader), "Resistance to available antibiotics in lactating cows with mastitis" (Dr Martin van der Leek of UP, Onderstepoort as Project Leader), plus "Using alternative methods such as bacteriocins and phages to eliminate/control mastitis microorganisms" (Prof Mark Laing of UKZN as Project Leader). Although Prof Robin Meeske of WCDA, Outeniqua who is the identified Project Leader, has indicated to take the responsibility, and in fact has done preliminary work in the milk flocculation problem, he has requested a brain storming session because of the complexity of the problem and the lack of literature on the subject. This will be attended to in the third quarter. The crops for silage in the Western Cape is in the project - proposal - and - soil - preparation - for - planting - crops - stage.

Task iv: R & D institutions will be guided through the required processes

This is done when the need arises.

Task v: Sourcing of funds.

This will be done once the need arises. Currently the two projects in the system (National Disease Monitoring and Microbiological Quality) are funded by Milk SA according to request.

### **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 MBA student  
Nothing required in reporting period.

Task ii: Provide input to WRC and UKZN  
Nothing required in reporting period

### **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: Provide SA water and carbon footprint  
The FAO in their calculations in the document: "Tackling climate change through livestock", includes South Africa in sub-Saharan Africa, which provides a skewed view of emissions and efficiency of livestock of the country. The RPEC and the R & D Advisory Committee recommended that the Program Manager in consultation with other sectors of the livestock industry communicate with the FAO and provide the correct figures. A letter was sent to

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

The recommendation for membership of the DSF still needs to be attended to.

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

The SANCIDF meetings are not that regular

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

The matter will be put on the Agenda of the next SANCIDF Meeting

the FAO which they politely responded to, stating that elsewhere in the document the true situation regarding South Africa is clearly shown and therefore do not think it is necessary to change the figures where South Africa is included in sub-Saharan Africa. They also requested the Program Manager R & D to review the statistics which they used in their calculations and if necessary provide them with more accurate figures. The figures are currently being evaluated. The matter will be taken up in the next RPEC Meeting and together with the other sectors of the livestock industry a decision will be made if the problem will be pursued further.

Task ii: Promote mitigation activities.  
Nothing to report. See activities in the report of the first quarter.

Tasks iii and iv: Reports to the IDF, GDAA and the IDF-FAO alliance.  
The IDF-GDAA's initiative on the Dairy Sustainability Framework (DSF): The Program Manager R & D participated in a webinar on 2014/01/23 where the DSF brochure was explained and input requested. The DSF Management requested dairy institutions to consider membership which the Program Manager through the RPEC recommended. This was referred to SANCIDF for consideration. The matter has still not be attended to. Nothing else came up during the reporting period but contact with the IDF-SCENV Committee is expected during the third quarter.

## Income and expenditure statement

Income and expenditure statement	No file has been uploaded
Unnecessary spending during period	No

## Popular Report

No file has been uploaded

## Additional documentation

[MSA THE RESEARCH COLUMN April 2014.docx](#)  
[MSA THE RESEARCH COLUMN May 2014.docx](#)  
[MSA THE RESEARCH COLUMN June 2014.docx](#)  
[MSA DAIRY R & D IN SA\\_2014-04-11.docx](#)  
[MSA DAIRY R & D IN SA\\_2014-04-29.docx](#)  
[MSA DAIRY R & D IN SA\\_2014-05-10.docx](#)  
[MSA DAIRY R & D IN SA\\_2014-05-15.docx](#)  
[MSA DAIRY R & D in SA\\_2014-06-02.docx](#)  
[MSA DAIRY R & D in SA\\_2014-06-27.docx](#)  
[MSA Report on R & D Programme Meissner 2014-06-03.pptx](#)

## 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