



Transformation through skills and knowledge development in the primary dairy industry - Additional funding

(PRJ-0162-2017)

Milk Producers Organisation (MPO)

Year 2017 (January 2017 till December 2017)

Project goals

Goal 1 - To develop dairy specialisation/ occupational part qualifications:
Objective 1: To develop the following specialisation modules (part qualifications) for the Dairy occupational qualification: [™] Artificial Insemination [™] Bio-security in dairy production
Objective 2: To repackage the Dairy Code of Practice for Milk Producers for the Dairy Farm worker occupational qualification.

Achievements

The MPO identified Reproduction management, Biosecurity management and the re-packaging of the *Dairy Code of Practice* for farmworker level as development priorities. The QCTO advised the MPO to develop the additional modules as specialised or part (partial) qualifications of the Dairy Occupational Qualification. These modules will be added to the design of the qualification after registration of the qualification at SAQA.

The Artificial Insemination module has been renamed **Dairy reproduction management** and includes artificial insemination as a reproduction practice. Development of this module included the curricula design, knowledge content development, knowledge, practical and workplace experience criteria assessment, learning material layout, printing and verification. The module covers the following chapters: Anatomy of the bovine reproductive system; Basic reproductive physiology; The production cycle of female and male dairy animals; Bovine reproductive diseases and syndromes; and Reproduction management practices on a dairy farm. This module will be piloted in 2018.

The design, development, layout and printing of the **Bio-security management** module was completed in 2017, but the inclusion of the module in the occupational curriculum design, knowledge, practical and workplace experience criteria for assessment and verification of the module will only take place in 2018. The module covers the following chapters: Biosecurity background; State of biosecurity in South Africa including related legislation; Current Biosecurity practices in SA Dairy operations; Biosecurity risks, cost and planning; Biosecurity assessment; Development of a biosecurity implementation plan. This module will be piloted in 2018.

The **Dairy code of practice for milk producers** has already been included as a module of the Dairy farm supervisor qualification. The need to repackage the Dairy code of practice for dairy farm workers in a more user friendly application has been identified. After consideration the MPO decided to present the Dairy code of practice by means of a gamification concept. Gamifications include a board game which is educationally relevant as it ensures experiential learning, enhances retention of concepts, encourages problem-solving and engagement of all

learners. The game consists of a facilitator guide with key concepts and game rules, dairy figurines and dices for the participants, icon cards and a board. The flow of the game includes discussion cards and practical demonstrations that correlate with specific chapters and aspects of the code of practice. The learning experience of the learners is improved through a recap session that forms part of the formative assessment and also enables the facilitator to identify gaps in the learning process.

The **Dairy code of practice for milk producers** has already been included as a module of the Dairy farm supervisor qualification. The MPO however identified a need to simplify this code for dairy farmworkers and a legenda(i)ry board game was developed to enable farmworkers to “moo-ve” towards compliance with food and safety requirements in an engaging and industry-relevant manner. This legenda(i)ry board game uses gamification as an alternative training approach. The gamification techniques compel farmworkers to prove their value and knowledge, spurring and boosting participation, while at the same time, injecting an element of fun.

The content of the Module 8, Code of practice for milk producers has been reworked into different types of cards that require some form of action:

Take your pic: photo / picture depicting a food safety aspect to discuss.

Have you herd: question regarding food safety is asked.

One or the udder: statement or a true / false statement regarding food safety.

Herd huddle: small group discussion regarding more complex aspects regarding food safety.

One chapter represents one round on the board. Since there are multiple rounds, it creates a friendly competitive environment amongst the participants. In this way, participants need to use their collective work experience, knowledge and engage with each other to educate on industry standards to ensure food safety.

The value of gamification for milk producers lies in the fact that this novel way of training:

Increases learning and retention of regulatory concepts regarding food safety

Increases awareness and understanding of the necessity of the *Dairy Code of Practice*

Encourages problem solving, participation, and team work

Uses educationally relevant and experiential learning methods

Enables ‘cross-pollination’ of learning in the sense that participants assist, correct and encourage each other in providing the most complete, accurate answers relevant to the *Code of Practice*

Involves all farmworkers – literate and illiterate in various ways

Ultimately, this legenda(i)ry board game serves as a platform to improve internal participation and operations in such a way that milk producers can overcome their compliance “herdles” and “moo-ve” towards the standards of best practice.

No Non-achievements / underperformance has been reported

Goal 2 - To develop a data capturing system and training website:

Objective 1: To develop a training data base (data capturing system) covering all the fields required by the MPO, AgriSeta and the QCTO for feedback reports. Objective 2: To develop the IDT website for facilitator access to learning material, assessments and training aids.

Achievements

In order to qualify as a Skills Development Provider of the Dairy occupational qualification (after registration) the MPO must have a thorough data capturing system for the management of the occupational qualification. The development of a database therefor aims to establish a learner work process and to provide dashboards reports for management purposes. The database will also be integrated into the MPO database for commercial and developing dairy farmers. A roadmap for the database has been developed to capture all relevant training data that will also ensure an application that register users, courses, workflow, email integration and reporting. The database is still subject to changes as the MPO Institute will only capture new data starting from 2018.

The MPO Institute's new webpage, with all relevant training detail and links, forms part of the MPO webpage.

No Non-achievements / underperformance has been reported

Income and expenditure statement

Income and expenditure statement	201712C 2016 Surplus budget 20180228.pdf
Unnecessary spending during period	No

Popular Report

[POPULAR REPORT SURPLUS.docx](#)

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