



Skills and knowledge development in the primary dairy industry

(PRJ-0141-2017)

Milk Producers Organisation (MPO)

Year 2017 (January 2017 till December 2017)

Project goals

Goal 1 - AgriSeta skills development, unit standard based training to farm employees of commercial and emerging farmers. To present the following skills development programmes to 165 employees of commercial and emerging dairy farmers: ^{*} Dairy Production. ^{***} Artificial Insemination.**

Achievements

A total of 271 students were trained in the skills development programmes which are dairy production and artificial insemination. The aim was to train 165 students, but the need for the presentation of these skills development programmes are evident in the fact that 106 extra students were trained. The students trained represented 38% of the emerging market and 62% farmworkers of commercial farmers.

Dairy Production

The dairy production skills programme addresses all important aspects to improve productivity on a dairy farm: pre-milking, milk-routine and post-milking procedures; cleaning the milking system, the milking parlour, milking equipment and the bulk tank; basic principles of record-keeping, hygiene as well as the handling and marketing of milk; basic principles of care/handling and feeding of calves, heifers and cows; the identification of udder diseases; and maintenance after milking.

Courses presented: 15

Students trained: 200

Venues: Western Cape, Eastern Cape, KZN, North West, Limpopo and Gauteng.

Artificial Insemination

The artificial insemination skills programme focuses on sustainable and economic viable reproduction principles varying from identifying standing oestrus of female breeding animals; observing the libido of the male breeding animal; recognising the signs of giving birth in female breeding animals; identifying abnormal behaviour of breeding animals during the birth process; observing and monitoring partus and post partum behaviour of breeding animals; and adhering to basic AI practices and procedures.

Courses presented: 7

Students trained: 71

Venues: Western Cape, Eastern Cape, Limpopo, Mpumalanga and North West.

No Non-achievements / underperformance has been reported

Goal 2 - Occupational based training to emerging farmers and farm employees of emerging and commercial farmers. To present the modules of the dairy farm employee and dairy supervisor occupational based qualification training; do RPL evaluation; and external assessment to 300 emerging farmers and farm employees of emerging and commercial farmers. The following modules can be presented:  The SA dairy farming environment.  Dairy calf and heifer rearing.  Feeding and health care.  Dairy animal health care.  Dairy animal production.  Dairy livestock feeding.  Milk harvesting and in-parlour processing.  Code of practice of milk producers.  Basic management and team leadership.

Achievements

The knowledge and practical components of the various modules were presented to farm workers and emerging farmers. No RPL evaluation or external assessments took place as the registration of the occupational qualification is still awaited. The knowledge components were conveyed during scheduled training sessions and competency was assessed by formative assessments. Practical skills were performed after the relevant theory has been discussed. Practical assessments took place according to an assessment guide with stipulated assessment criteria. Workplace experience forms an important part of the training programme and there for each learner received a logbook stipulating how (observing, assisting or without supervision) and for how long the learner must actively be involved in specified tasks on a dairy farm.

The aim was to train 300 students in the various modules of the occupational qualification. A total of 290 students were trained, only 10 less than aimed for. It must however be acknowledged that more students were trained in the skills development programmes. The students trained represented 52% of the emerging market and 48% farmworkers of commercial farmers.

Module 1 - The South African dairy farming environment: This module covered an introduction to the South African dairy industry; dairy breeds; and the basic dairy farming business concepts that is a prerequisite for success.

Courses presented: 3

Students trained: 37

Venue: North West, KZN and Eastern Cape.

Module 2 – Dairy calf and heifer rearing, feeding and health care: This module covered dairy calf and heifer health care; calf-rearing systems; hygiene; calf-feeding concepts; awareness of dairy calf diseases; and calf and heifer care and production concepts.

Courses presented: 4

Students trained: 47

Venue: Limpopo, North West, KZN and Eastern Cape.

Module 3 – Dairy health care: This module covered the basic functions of the anatomical

systems of dairy animals; general dairy livestock health; awareness of the causes of diseases in dairy animals; health assessment; parasites and basic life cycles; and farm biosecurity and risk prevention (including zoonotic diseases).

Courses presented: 3

Students trained: 51

Venue: KZN and Eastern Cape.

Module 4 – Dairy animal production: This module covered dairy herding and handling practices; dairy breeding and reproduction concepts, water supply systems; and fencing on a dairy farm.

Courses presented: 3

Students trained: 37

Venue: KZN, Western Cape and North West.

Module 5 – Dairy livestock feeding: This module covered dairy feed types and feeding practices; feeding of heifers; feeding of cows in milk; feeding of dry cows; and feeding facilities and equipment.

Courses presented: 3

Students trained: 37

Venue: KZN, Western Cape and North West.

Module 6 – Milk harvesting and in-parlour processing: This module covered milk-harvesting facilities; udder health; the milk-harvesting process; dairy parlour equipment and systems; dairy parlour hygiene; essential production records; composition of milk and quality indicators; in-parlour processing and quality control concepts.

Courses presented: 2

Students trained: 22

Venue: KZN and North West.

Module 7 – Team leadership: This module covered introductory thoughts on supervision; performance standards; motivation and team leadership; interpersonal relations; first-line discipline; and work efficiency and effectiveness.

Courses presented: 1

Students trained: 25

Venue: KZN

Module 8 – Dairy code of practice: This module covered all the requirements of a dairy farm that is important to ensure food safety: structural requirements and machine maintenance; good milking practices; animal health and welfare; hygiene; documentation; and standards of- and quality control for raw milk.

Courses presented: 2

Students trained: 34

Venue: Limpopo and KZN.

No Non-achievements / underperformance has been reported

Goal 3 - Occupational based Herd Manager's Course. To present the following modules to 40 emerging and commercial farmers: [■] Dairy farm production management. [■] Farm business management. [■] Pasture management.

Achievements

Industry professionals presented the knowledge components of the production management, business management and pasture management modules to a total of 59 students. These students represent 83% from the emerging market and 17% were managers of commercial farms.

Module 9 – Dairy farm production management: This module covered concepts that are important contributing factors to the success of a dairy farm operation: dairy farm design concepts; dairy reproduction management; dairy nutrition management; and dairy health management.

Courses presented: 1

Students trained: 15

Venue: KZN (Cedara Agricultural College)

Module 10 – Dairy farm business management: This module covered concepts that will enable a manager to successfully manage a dairy farm: farm labour management, financial and stock management, natural resource management and dairy farming-related legislation.

Courses presented: 1

Students trained: 19

Venue: KZN (Cedara Agricultural College)

Module 11 – Dairy pasture management: This module covered concepts relating to cultivated pastures on South African dairy farms; farm planning; pastures and fodder flow; principles of grazing management; the nutritional value of green pastures; and health risks of dairy cattle on pastures.

Courses presented: 1

Students trained: 25

Venue: KZN

No Non-achievements / underperformance has been reported

Goal 4 - Dairy Occupational Qualification revision and continuous evaluation. [■] Participation in sector skills development forums: - Primary Skills Development Committee - Secondary Skills Development Committee - Transformation Advisory Committee - AgriSeta Sector Skills Committee - TUT Advisory Committee. [■] Revision, development and corrections of training material, policies and procedures. [■] Continuous liaison with QCTO and AgriSeta re the registration of the dairy qualification and AQP

registration.

Achievements

Dairy Occupational Qualification revision and evaluation

The QCTO (Quality Council for Trade and Occupations) appointed the MPO and AgriSeta as the Development Quality Partner (DQP) of the dairy occupational qualification. The curriculum design was already submitted to AgriSeta in 2012. Despite continuous enquiries by the MPO, the AgriSeta failed to successfully process the curriculum design to the QCTO for approval. The MPO concluded workshops with the QCTO in January 2017 to re-initiate the registration process. The dairy occupational qualification design was re-packaged by the MPO for capturing by the QCTO. The qualification was evaluated and approved by the QCTO, published for public comment and is currently awaited registration by SAQA.

The non-registration status of dairy occupational qualification resulted in the MPO presenting the Modules as an industry qualification. This matter was also discussed with the QCTO. Once the qualification is registered, the MPO will submit all the (POE) Portfolios of Evidence to the QCTO for evaluation. QCTO will determine whether an EISA (external integrated summative assessment) have to be conducted to re-evaluate (assess) all the students that were trained in the various modules.

Revision of training material

Module 9 – The Dairy production management assignment assessment was adapted. This module has a knowledge assessment test as well as an assignment. The assignment tests the ability of the student to integrate management data. The initial assignments were too difficult for the students and had to be revised. Industry experts were consulted in the process.

Module 10 – Farm business management has been revised after the pilot presentation in November 2016. Knowledge content and the assessment assignment were adapted.

Moderation tools for the modules of the Dairy farmworker and supervisor part qualifications have been developed. The required 25% moderation of training has also been completed on the knowledge and practical assessments.

The MPO Institute presented the various farmworker, supervisor and management modules of the dairy occupational qualification to students at Orange Grove Dairy. Orange Grove Dairy selected the students, who were either emerging farmers or beneficiaries, to participate in the various programmes. Orange Gove Dairy hosted a graduation ceremony in December 2017. Industry certificates acknowledging the completion of the knowledge and practical components of the dairy farm worker, supervisor and managers curricula were presented. A total of 79 certificates were awarded: 20 students completed the farmworker training in 2016 and 17 completed the farmworker training in 2017; 11 students completed the supervisor training in 2016 and 6 students completed the supervisor training in 2017; 25 students were awarded with certificates for completion of the knowledge component of management modules.

Participation in sector skills development forums

DAFF:

Strategic Workshop for TVET Colleges with DAFF, Cedara: 18 April 2017

QCTO:

QCTO Workshop: 19 Jan 2017

QCTO Workshop for service providers: 16 Feb 2017

AgriSeta:

AgriSeta Sector Skills Committee (SSC) meeting: 22 Feb 2017; 30 and 31 Aug 2017.

AgriSeta ATR/WSP Workshop: 9 Mar 2017

AgriSeta AGM and Conference: 4 and 5 Oct 2017.

Agri SA:

Agri SA Transformation Hub/Centre of Excellence meeting: 15 Feb 2017; 26 Sep 2017; 17 Nov 2017

AgriSA/Agbiz Workshop: 14 Mar 2017

Milk SA:

MSA Transformation Advisory Committee meeting: 23 May 2017

Milk SA Primary Industry Skills and Knowledge Development Meeting: 14 Aug 2017.

Milk SA Secondary Industry Skills and Knowledge Development Meeting: 16 Aug 2017.

Milk SA Transformation Advisory Meeting: 1 Sep 2017.

Primary Industry Technical (Training) Committee Meeting: 19 Sep 2017.

Milk SA AGM and Project leader's feedback: 1 Dec 2017.

No Non-achievements / underperformance has been reported

Goal 5 - Promotion and marketing of dairy skills and knowledge development. ■■ Identification of emerging dairy farmers and projects. ■■ Continuous training needs analysis. ■■ Promotional visits. ■■ Website design and update. ■■ Development of a training prospectus. ■■ Marketing through media platform such as The Dairy Mail, bulk emails to commercial farmers. ■■ Marketing brochures.

Achievements

Marketing and promotion:

The MPO Institute is continuously working on the promotion and marketing of dairy skills and knowledge development in the primary industry. The following marketing platforms were used during 2017:

The Dairy Mail: monthly articles on skills and knowledge development as well as training activities hosted by the MPO Institute.

The MPO weekly newsletter promotes skills and knowledge development to commercial farmers and industry stakeholders.

Bulk mobile texting were used to promote the Dairy day for black emerging farmers at the Alfa Livestock Show in Parys as well as to promote the dairy management courses that took place in the 3rd and 4th quarter of 2017.

Dairy information and training was posted on the MPO Facebook profile.

Radio interviews with RSG and Landbou Radio.

Grootplaas TV interview.

The MPO Institute promoted the Dairy Code of Practice (that supports the primary sector with compliance to all relevant food safety standards) at the AgriExpo event hosted at Sandringham near Stellenbosch. Several farmworkers attended a presentation on the industry norms applicable to animal health, animal feed and milking parlours that will ensure effective, safe and

ultimately sustainable dairy farming.

The MPO also promoted dairy training offered by the MPO Institute during MPO road shows and farmer's meetings.

Identification of black emerging dairy farmers:

The MPO Institute presented a Dairy day for black emerging dairy farmers during the ALFA Livestock Show in Parys. Milk SA provided access funding from 2016 to host the event and Milk SA, SAMPRO, DSA and the MPO also participated as exhibitors at the Dairy Expo tent. The Dairy day included a discussion session and presentations by various industry experts. The following topics were discussed: The key characteristics of the dairy industry; the role of government, the ARC and Milk SA in dairy development; successful dairy entrepreneurship; the impact of skills and knowledge development; the importance of milk quality and primary health care as a key success factor for dairy farming. A practical session on clinical health observation and diagnoses of dairy cows took place at the Dairy Expo tent.

A total of 41 black emerging dairy farmers attended the event. The farmers represented the Eastern Cape, Free State, KZN, Limpopo and Gauteng. The developing farmers also had the opportunity to network with input providers, participate in demonstrations and observe highly pedigreed animals. The success of the event is evident in the number of developing black farmers who attended the dairy day, regardless distances that had to be travelled. The MPO Institute also received numerous training requests after the event.

Identification of training and development needs in the primary dairy sector:

The MPO Institute identified a need for the development of the following courses/learning material:

Dairy reproduction management

Biosecurity management

Re-packaging of DSA's *Dairy Code of Practice for Milk Producers* for dairy farmworker level.

These modules will be added as specialisation modules of the dairy occupational qualification. Primary industry surplus funding from 2016 was utilised for the development of these modules

Website design and update:

A new MPO Institute webpage and training database were developed. The database covers all the information of training participants that are linked to dairy producers, training processes, on-line registration for courses and the provision of dashboard reports. The MPO Institute will continue with the refinement of the database in 2018 to enable, amongst others, links to the MPO Institute Webpage, AgriSeta, QCTO, registration of facilitators, assessors and moderators.

Development of a training prospectus:

A MPO Institute prospectus, with detail information on the content of all the skills development programmes and dairy occupations modules, has been developed. Only a limited number of copies were printed to be distributed to stakeholders and dairy producers in the Eastern Cape and KZN. The prospectus will be updated with the new modules that were completed in 2017 for further distribution in 2018.

MPO Training Institute marketing brochures were distributed during farmers days as well as the Alfa and AgriExpo events.

No Non-achievements / underperformance has been reported

Income and expenditure statement

Income and expenditure statement	201712C Milk SA budget 20180228.pdf 201712C Alfa budget 20180228.pdf
Unnecessary spending during period	No

Popular Report

[TRAINING POPULAR REPORT.docx](#)

Additional documentation

[TRAINING SUMMARY 2017.docx](#)

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