



## ***Development of learning material for the dairy occupational curriculum and qualification.***

**(PRJ-0043-2014)**

***Milk Producers Organisation***

***Year 2014*** (January 2014 till December 2014)

### **Project goals**

**Goal 1 - Finalize the development and evaluation of the learning material aligned to the knowledge module specification for the Dairy Farm Worker, Dairy Farm Supervisor and Farm Dairy Herd Manager**

#### ***Achievements***

The following knowledge modules for the Dairy Farm Worker, Dairy Farm Supervisor and Dairy Farm Manager have been completed and verified:

##### **DAIRY FARM WORKER AND DAIRY FARM SUPERVISOR**

###### **MODULE 1: SOUTH AFRICAN DAIRY FARMING ENVIRONMENT**

1. Introduction to the South African dairy industry
2. Dairy breeds
3. Basic dairy farming business concepts

###### **MODULE 2: DAIRY CALF AND HEIFER REARING, FEEDING AND HEALTH CARE**

1. Introduction to dairy calf and heifer health care
2. Calf rearing systems
3. Hygiene and care
4. Calf feeding concepts
5. Awareness of dairy calf diseases
6. Calf and heifer care and production concepts

###### **MODULE 3: DAIRY ANIMAL HEALTH CARE**

1. Diagrammatic illustrations and basic functions of the anatomical system
2. General dairy livestock health
3. Awareness of causes of disease in dairy animals
4. Health assessment
5. Parasites and basic lifecycles
6. Farm bio-security and risk prevention (including zoonotic diseases)

###### **MODULE 4: DAIRY ANIMAL PRODUCTION**

1. Animals herding and handling practices
2. Dairy animal breeding concepts
3. Water supply systems on dairy farms
4. Fencing on a dairy farm

###### **MODULE 5: DAIRY LIVESTOCK FEEDING**

1. Dairy feed types and feeding practices

2. Feeding of heifers
3. Feeding of cows in milk
4. Feeding of dry cows
5. Feeding facilities and equipment

#### MODULE 6: MILK HARVESTING AND IN-PARLOUR PROCESSING

1. Milk harvesting facilities
2. Udder health
3. The milk harvesting process
4. Dairy parlour equipment and systems
5. Dairy parlour hygiene
6. Essential production records
7. Composition of milk and quality indicators
8. In-parlour processing and quality control concepts

#### MODULE 7: TEAM LEADERSHIP

1. Introductory supervision concepts
2. Performance standards concepts
3. Motivation and team leadership concepts
4. Interpersonal relations
5. First line discipline
6. Work efficiency and effectiveness

#### DAIRY FARM MANAGER

#### MODULE 8: DAIRY FARM PRODUCTION MANAGEMENT

1. Dairy farm design concepts
2. Dairy animal breeding
3. Dairy animal nutrition
4. Dairy animal health management

#### MODULE 9: FARM BUSINESS MANAGEMENT

1. Farm business management
2. Farm labour management
3. Financial and stock management
4. Natural resource management
5. Introductory overview of dairy farming related legislation

An extra module, based on the Dairy Standard Agency's (DSA) Code of practice for milk producers, which include acts, regulations and guidelines applicable to the safety and quality of raw milk, were also developed.

#### MODULE 10: OCCUPATIONAL HEALTH AND SAFETY - CODE OF PRACTICE FOR MILK PRODUCERS

1. Introduction to the Code of Practice for Milk Producers
2. Structural requirements and machine maintenance
3. Good milking practices
4. Animal health and welfare
5. Hygiene
6. Documentation
7. Standards and quality control for raw milk

(Module 6 - 10 to be submitted for editing and layout in 2015)

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

**Goal 2 - Finalize the Internal Assessment Instruments for the knowledge module specification for the Dairy Farm Worker, Dairy Farm Supervisor and Farm Dairy Herd Manager**

## ***Achievements***

Internal assessment instruments for the knowledge module specification for the Dairy Farm Worker, Dairy Farm Supervisor and Dairy Herd Manager have been completed (Module 1 - 9).

Module 1: The South African Dairy farming environment

Module 2: Dairy calf and heifer rearing, feeding and health care

Module 3: Dairy animal health care

Module 4: Dairy animal production

Module 5: Dairy livestock feeding

Module 6: Milk harvesting and in-parlour processing

Module 7: Team leadership

Module 8: Dairy farm production management

Module 9: Farm business

Module 10: Occupational Health and Safety - Code of Practice for Milk Producers

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

**Goal 3 - Finalize the practical learning exercises and required resources aligned with the practical modules for the Dairy Farm Worker, Dairy Farm Supervisor and Farm Dairy Herd Manager**

## ***Achievements***

The practical learning exercises (logbook) aligned with the practical modules for the Dairy Farm Worker, Dairy Farm Supervisor and Dairy Herd Manager have been completed.

Practical learning exercises include:

1. Perform calf rearing, production and health care practices
2. Perform animal production and health care practices
3. Prepare feed and feed cows in milk
4. Harvest milk, attend to milk parlour hygiene and equipment
5. Attend to dairy parlour water treatment and waste water.
6. Lead and direct work teams
7. Initiate and maintain first line discipline.
8. Keep dairy farm records.

The material was submitted to AgriSeta for verification and approval. Changes and adaptations were made after several consultation sessions.

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

## **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

## **Popular report and Additional documentation**

## 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