



***Design and development of the curriculum as well as learning material development for a dairy farming occupational qualification.***

**(PRJ-0006-2013)**

***Milk Producers Organisation***

***Quarter 2 2013/2013*** (April 2013 till June 2013)

**Project goals**

**Goal 1 - Compile and submit a formal application to the QCTO to act as Development Quality Partner.**

***Achievements***

Refer to Jan - Mar 2013 quarterly report for background detail.

AgriSeta concluded a partnership with the MPO to develop the Dairy Occupational Qualification according to the expectations of the QCTO. The MOU between the AgriSeta and the MPO for this project was signed in Dec 2011.

Goal achieved.

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

**Goal 2 - Get approval from the QCTO for the scope of occupations.**

***Achievements***

Refer to Jan - Mar 2013 quarterly report for background detail.

Goal achieved.

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

**Goal 3 - Co-ordinate and fund an industry meeting to confirm the process, stakeholder involvement, the role of the MPO as Development Quality partner, appointment of persons who will act as the Qualification Development Facilitators.**

***Achievements***

Refer to Jan - Mar 2013 quarterly report for background detail.

Goal achieved.

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

#### **Goal 4 - Orientation of Qualification Development Facilitators appointed by the MPO.**

##### ***Achievements***

Refer to Jan - Mar 2013 quarterly report for background detail.

Goal achieved.

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

#### **Goal 5 - Dev of the Occupational Curriculum for the Dairy Farm Worker: i. Dev of occup. profile. ii.Dev of subject specs. iii.Dev of practical skills modules. iv. Dev of work experience modules. v. Dev of final curric. document. vi. Dev of Qualification Assessment Specs. vii. Mandatory reporting to the QCTO.**

##### ***Achievements***

The knowledge specifications, practical skills and work experience modules of the Dairy Unit Manager were developed over three distinct phases:

- During the initial development phase, the learning process design focused on the evaluation of the generic livestock farming components that were developed during 2012.
- This phase was followed by a dairy specific re-conceptualisation phase at Dairy Farm Supervisor level.
- The introduction of the Modules of Employable Skills concepts by the QCTO created an opportunity to rethink the curriculum structure in terms of dairy farming per se. The initial concept considered the development of three different qualifications. A qualification at dairy farm worker level, followed by a qualification at dairy farm supervisor level and finally a qualification at dairy farm unit manager level. This approach was restructured with the dairy farm worker and supervisor being established as Modules of Employable Skills within a single Dairy Unit/Herd Manager qualification.

Refer to Jan - Mar 2013 quarterly report for background detail on the following documents that were submitted tot the QCTO for approval:

Occupational Qualification Document

External Assessment Specification Document

Curriculum Document (only table of context as this document is still a work document and consist of more than 100 pages.)

The QCTO advised the MPO and AgriSeta to restructure the curricula according to new concepts as developed and approved by the QCTO. AgriSeta advised the MPO to apply for AgriSeta funding for the restructuring of the curriculum. The QDF, Mr H. van Deventer, has been contracted to facilitate the process. These restructuring include semantic concepts and does not affect the content of the designed dairy occupational curriculum.

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

**Goal 6 - Development of the Occupational Curriculum for the Dairy Farm Supervisor: i. Dev of occup. profile. ii.Dev of subject specs. iii.Dev of practical skills modules. iv. Dev of work experience modules. v. Dev of final curric. document. vi. Dev of Qual. Ass. Specs. vii. Mandatory reporting to QCTO**

### ***Achievements***

Refer to Goal 5 and the Jan - Mar 2013 quarterly report for background detail on the development process of the occupational curriculum for the Dairy Farm Supervisor.

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

**Goal 7 - Development of the Occupational Curriculum for the Dairy Herd Manager: i. Dev of occup. profile. ii.Dev of subject specs. iii.Dev of practical skills modules. iv. Dev of work experience modules. v. Dev of final curric. document. vi. Dev of Qualif. Assess. Specs. vii. Mandatory reporting to QCTO**

### ***Achievements***

Refer to Goal 5 and the Jan - Mar 2013 quarterly report for background detail on the development process of the occupational curriculum for the Dairy Herd Manager.

SEE ATTACHEMENT FOR GOAL 8: DEVELOPMENT OF LEARNING MATERIAL

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

**Goal 8 - Development of learning material**

### ***Achievements***

The first two modules of the Dairy Farm Supervisor's learning material has been developed and are in process of being verified by various industry specialists. The IDT started with the development of the Dairy Supervisor learning material, as it is a more logic approach in laying the foundation for the development of the Dairy Farm Worker and Dairy Herd Manager's learning material. The Dairy Farm Supervisor learning material consists of the following modules:

- 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

Detail of Modules and Chapters that have been developed and are in the process of being verified:

MODULE 1 (NQF level 2)

## South African Dairy farming environment

### CHAPTERS

#### Introduction to the South African dairy industry (30%)

1. Career opportunities in the dairy industry
2. Commercial dairy farming
3. Emerging farmers and opportunities
4. Risks in dairy farming
5. The dairy industry value chain

#### Dairy breeds (30%)

1. Holstein Friesland
2. Jersey
3. Guernsey
4. Ayrshire
5. Dairy Swiss
6. Dual purpose breeds
7. Cross breeds
8. Choosing a breed

#### Basic dairy farming business concepts (40%)

1. Understanding management
2. Understanding money matters and costs
3. Understanding marketing
4. Understanding machines and equipment
5. Understanding manpower
6. Understanding of production material and resources
7. Understanding the value of livestock
8. Understanding productivity and profitability
9. Understanding production cycles

### MODULE 2 (NQF level 3)

#### Dairy calf and heifer rearing, feeding and health care

### CHAPTERS

#### Introduction to dairy calf and heifer health care (15%)

1. Developmental time scale of calves and replacement heifers
2. Care of calving and the new-born calf (vitality, colostrum, navel disinfection)
3. Importance of healthy calves and heifers in terms of productive herds
4. Visual appearance of a healthy calf
5. Factors that affect calf health
6. Importance of colostrum and passive immunity
7. Vaccination programs (active immunity) for dairy calves and heifers
8. Types of vaccines, storage and handling of vaccines (maintenance of the cold chain)
9. Internal parasite control
10. External parasite control
11. Separation of calves with disease and quarantine principles
12. Bio-security of calf rearing facilities

#### Calf rearing systems (10%)

1. Permanent housing
2. Movable pens
3. Calf camps for group rearing
4. Deep litter systems

#### Hygiene and Care (25%)

1. Importance of hygiene
2. Daily inspection practices including critical inspection points

3. Factors affecting hygiene
4. Cleaning and disinfecting chemicals and equipment
5. Signs of poor hygiene
6. Fly control
7. Water drainage and moisture control
8. Personal hygiene and protective clothing

Calf feeding concepts (15%)

1. Handling and feeding of colostrum
2. Handling and preparing milk and milk substitutes for feeding
3. Milk feeding risks (mastitis, milk containing residues such as antibiotics)
4. Basic nutritional requirements of dairy calves and heifers at various ages
5. Importance of roughage and concentrates at various ages
6. Milk feeding schedules of dairy calves
7. Feeding schedules for calves and heifers
8. Water and water quality needs
9. Cleaning and disinfection of feeding equipment
10. Weaning of calves

Awareness of dairy calf diseases (15%)

1. Causes of diarrhoea by viral diseases including rota, corona
2. Causes of diarrhoea by bacterial diseases including E.coli, Salmonella spp.
3. Causes of diarrhoea by protozoal diseases (coccidiosis)
4. Nutritional induced diarrhoea
5. First response treatments for diarrhoea
6. Causes of other diseases such as pneumonia, eye infections, navel
7. infections, calf diphtheria

Calf and heifer care and production concepts (20%)

1. Calf and heifer handling and restraining
2. Identification, marking and branding
3. Removal of accessory teats
4. De-horning
5. Castration

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

## Income and expenditure statement

Income and expenditure statement	<a href="#">Statement.2.docx</a>
Unnecessary spending during period	No

## Popular Report

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## Additional documentation

No file has been uploaded

## 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