

DAIRY ANIMALS BREEDING

UNIT CODE: DA/CU/FM/CR/03/3/B

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Breed dairy animals

Duration of Unit: 24 hours

Unit Description

This unit specifies the competencies required to breed dairy animals. It involves applying food safety measures while participating in dairy animal identification, heat detection, parturition handling and restraining dairy animals.

Summary of Learning Outcomes

1. Apply food safety measures to breed dairy animals
2. Prepare to breed dairy animals
3. Breed dairy animals
4. Evaluate dairy animal breeding
5. Complete dairy animal breeding

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Apply food safety measures to breed dairy animals	<ul style="list-style-type: none">• Meaning of food safety• Importance of food safety• Principles of food safety• Prerequisite programmes<ul style="list-style-type: none">○ Meaning and importance of prerequisite programmes○ Relevant programmes<ul style="list-style-type: none">▪ Good agricultural practices▪ Good manufacturing practices▪ Standard Sanitary Operating Procedures• Hazard analysis<ul style="list-style-type: none">○ Significance of hazards○ Types and sources of hazards○ Methods of hazard control• Components of HACCP plan<ul style="list-style-type: none">○ Critical control points	<ul style="list-style-type: none">• Written tests• Oral questioning• Observation

Learning Outcome	Content	Methods of assessment
	<ul style="list-style-type: none"> ○ Critical control limits ○ Monitoring procedures on the control limits ○ Corrective actions ○ Verification and validation ○ Record keeping 	
2. Prepare to breed dairy animals	<ul style="list-style-type: none"> • Dairy animal breeds • Breeding management tools, equipment, materials and supplies • Identification methods <ul style="list-style-type: none"> ○ Ear tagging ○ Ear notching ○ Tattooing ○ Branding ○ Electronic transponders • Animal welfare • Occupational safety and health standards 	<ul style="list-style-type: none"> • Written tests • Observation • Oral questions • Third party reports • Interviewing
3. Breed dairy animals	<ul style="list-style-type: none"> • Heat detection • Dairy animal restraining methods and procedures • Mating systems <ul style="list-style-type: none"> ○ Natural ○ Artificial Insemination • Gestation lengths • Parturition process • Signs of dystocia • Steaming up • Inbreeding depression • Occupational safety and health regulations 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Interviewing • Third party reports
4. Evaluate dairy animal breeding	<ul style="list-style-type: none"> • Upgrading • Dairy animal registration benefits 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Interviewing • Third party reports

Learning Outcome	Content	Methods of assessment
5. Complete dairy animal breeding	<ul style="list-style-type: none"> • Types of breeding supplies and materials • Waste disposal 	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Interviewing

Suggested Methods of Instruction

- Demonstration by trainer
- Practice by the trainee
- Field trips
- Discussions
- Direct instruction

Recommended Resources

Functional dairy farm with the following:		
<ul style="list-style-type: none"> • AI services • PPEs • Weighing bands • Identification equipment and materials • Navel clips 	<ul style="list-style-type: none"> • Breeding males • Feed rations • Holding crush • PPEs • Maternity pens • Ropes 	<ul style="list-style-type: none"> • Water • Weighing band • Breeding calendar • Disinfectants • Livestock Production Manual