

DAIRY FORAGE PRODUCTION

UNIT CODE: 0811 341 01A

TVETCDACC UNIT CODE: DA/CU/FM/CR/01/3/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Produce dairy forage

Duration of Unit: 60 hours

Unit Description

This unit specifies the competencies required to produce dairy forage. It involves preparing to produce dairy forage, produce dairy forage and complete dairy forage production

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Prepare to produce dairy forage	15
2.	Produce dairy forage	30
3.	Complete dairy forage production	15
Total		60

Learning Outcomes, Content and Methods of assessment

Learning Outcome	Content	Methods of assessment
1. Prepare to produce dairy forage	1.1. PPEs used in forage production 1.1.1. Gloves 1.1.2. Overall	<ul style="list-style-type: none">• Observation• Written tests• Oral questions

Learning Outcome	Content	Methods of assessment
	<p>1.1.3. Head gear</p> <p>1.1.4. Face mask</p> <p>1.1.5. Overall.</p> <p>1.2. Methods of land preparation</p> <p> 1.2.1. Land clearing</p> <p> 1.2.2. Ploughing</p> <p> 1.2.3. Harrowing</p> <p> 1.2.4. Levelling</p> <p>1.3. Land preparation tools, implements and machinery</p> <p> 1.3.1. Rotavator</p> <p> 1.3.2. Cultivator</p> <p> 1.3.3. Disc harrow</p> <p> 1.3.4. Hoe</p> <p> 1.3.5. Drill</p> <p> 1.3.6. Shovel</p> <p> 1.3.7. Tractor</p> <p> 1.3.8. Ridger.</p> <p>1.4. Planting materials</p> <p> 1.4.1. Types</p> <p> 1.4.2. Preparation</p> <p>1.5. Soil conservation methods</p> <p> 1.5.1. Terracing</p> <p> 1.5.2. Gabions</p> <p> 1.5.3. Mulching</p> <p> 1.5.4. Contour farming.</p> <p>1.6. Environmental protection measures</p>	<ul style="list-style-type: none"> • Product analysis • Interviewing

Learning Outcome	Content	Methods of assessment
	1.7. Occupational safety and health procedures	
2. Produce dairy forage	<p>2.1. Forage types</p> <p> 2.1.1. Pasture</p> <p> 2.1.2. Fodder crops</p> <p> 2.1.3. Multi-purpose trees</p> <p>2.2. Forage planting methods</p> <p> 2.2.1. Direct sowing</p> <p> 2.2.2. Under sowing</p> <p> 2.2.3. Oversowing.</p> <p>2.3. Forage spacing requirements</p> <p> 2.3.1. Seed rates</p> <p> 2.3.2. Gapping</p> <p>2.4. Pest, weed and disease control</p> <p> 2.4.1. Types</p> <p> 2.4.2. Control methods</p> <p>2.5. Fertilizer application</p> <p> 2.5.1. Types of fertilizer</p> <p> 2.5.2. Application rates and methods</p> <p> 2.5.3. Time</p> <p>2.6. Irrigation methods</p> <p> 2.6.1. Overhead</p> <p> 2.6.2. Furrow / canal</p> <p> 2.6.3. Drip</p>	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Product analysis • Interviewing

Learning Outcome	Content	Methods of assessment
3. Evaluate dairy forage production	3.1.Forage quantity forecasting 3.2.Forage judging <ul style="list-style-type: none"> 3.2.1.Dry matter content 3.2.2.Crude protein 3.2.3.Neutral detergent fibre 3.2.4.pH 3.2.5.acid detergent fibre 3.3. Forage production errors	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Interviewing
4. Complete dairy forage production	4.1.Forage conservation methods <ul style="list-style-type: none"> 4.1.1.Hay making 4.1.2.Standing hay 4.1.3.Silage making 4.2.Waste management	<ul style="list-style-type: none"> • Observation • Written tests • Oral questions • Interviewing

Suggested Methods of Instruction

- Project
- 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"> • Tractors • Land 	<ul style="list-style-type: none"> • Mowers • Forage choppers / 	<ul style="list-style-type: none"> • Hay barn • Farm tools (Hoe, fork,

<ul style="list-style-type: none"> • Trailer • Ploughs • Harrows • Tillers • Sprayers • Rakes • Tedders 	<ul style="list-style-type: none"> chaff cutters • Balers • Forage harvesters • Hammer mills • Molasses • Silage silos • Forage planting materials 	<ul style="list-style-type: none"> rake, panga, shovel and watering cans) • Polythene sheets and tubes • Baling twines • Forage box
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