

## **FORAGE CROPS PRODUCTION**

**UNIT CODE:** 0811 451 16A

**TVET CDACC UNIT CODE:** AGR/CU/EXT/CR/04/5/MA

**UNIT DURATION:** 120 HOURS

### **Relationship to Occupational Standards**

This unit addresses the unit of competency: Produce forage crops

### **Unit Description**

This unit specifies competencies required to produce and conserve forage. It entails; preparation of land for forage growing, establishment and management of forage crops, utilization of forage.

### **Summary of Learning Outcomes**

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

S/No	Learning Outcomes	Duration (Hours)
1.	To prepare planting materials	20
2.	To prepare crops seedbed	20
3.	To plant forage crops	20
4.	To manage forage crops	30
5.	To harvest forage crops	10
6.	To utilise forage crops	20
<b>Total</b>		<b>120</b>

### **Learning Outcomes, Content and Suggested Assessment Methods**

<b>Learning outcomes</b>	<b>Content</b>	<b>Suggested assessment methods</b>
1. Prepare planting materials	<p><b>Theory</b></p> <p>1.1 Planting materials preparation</p> <p>    1.1.1 Definition of terms</p> <p>    1.1.2 Types of planting materials</p> <p>1.2 Planting materials preparations tools and equipments</p> <p>    1.2.1 Uses</p> <p>    1.2.2 Maintenance</p> <p>1.3 Planting materials</p> <p>1.4 Treatment of planting materials</p> <p>1.5 Planting materials preparation records</p> <p><b>Practice</b></p> <p>1.6 Prepare planting materials</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
2 Prepare crop seedbed	<p><b>Theory</b></p> <p>2.1 Crop seedbed preparation</p> <p>    2.1.1 Definition of terms</p> <p>    2.1.2 Importance of crop seedbed preparation</p> <p>2.2 Crop seedbed preparation tools and equipment's</p> <p>    2.2.1 Uses</p> <p>    2.2.2 Maintenance</p> <p>2.3 Land clearing</p> <p>2.4 Tillage operations</p> <p>2.5 Crop seedbed preparation soil conservation measures</p> <p>2.6 Crop seedbed preparation records</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practical</li> </ul>

	<b>Practice</b> <b>2.7 Prepare crop seedbed</b>	
3 Plant forage crops	<b>Theory</b> <p>3.1 forage crops establishment</p> <p>    3.1.1 definition of terms</p> <p>    3.1.2 methods of establishment</p> <p>3.2 forage crops establishment inputs</p> <p>3.3 forage crops establishment.</p> <p>3.4 forage crops establishment records</p> <b>Practice</b> <p>3.5 establish forage crops</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practical</li> </ul>
4 Manage forage crops	<b>Theory</b> <p>4.1 Forage management</p> <p>    4.1.1 Definition of terms</p> <p>    4.1.2 Importance of forage management</p> <p>4.2 Forage crops management farm inputs</p> <p>4.3 Forage crops management practices</p> <p>4.4 Forage crops management records</p> <b>Practice</b> <p>4.5 manage forage crops</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
5 Harvest forage crops	<b>Theory</b> <p>5.1 Forage crops harvesting</p> <p>    5.1.1 Definition of terms</p> <p>    5.1.2 Methods of harvesting forage crops</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ oral questions</li> <li>• Workshop reports</li> </ul>

	<p>5.2 Forage crops harvesting tools and equipment's</p> <p>    5.2.1 Uses</p> <p>    5.2.2 Maintenance</p> <p>5.3 Forage crops maturity indices</p> <p>5.4 Forage crop harvesting</p> <p>5.5 Forage crops harvesting records</p> <p><b>Practice</b></p> <p>5.6 Harvest forage crops</p>	<ul style="list-style-type: none"> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
6 Utilize forage crops	<p><b>Theory</b></p> <p>6.1 Forage crops utilization</p> <p>    6.1.1 Definition of terms</p> <p>    <b>6.1.2 Importance of forage utilization</b></p> <p>6.2 Forage crops utilization tools, equipment and machinery</p> <p>6.3 Forage crops conservation</p> <p>6.4 Forage crops utilization records</p> <p><b>Practice</b></p> <p>6.5 utilize forage crops</p>	•

### Suggested Methods of Instruction

- Role playing
- Group discussion
- Direct instruction

### Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/Specifications	Quantity	Recommended Ratio (Item: Trainee)
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<b>A</b>	<b>Learning Materials</b>			
1.	Business Journals		5 pcs	1:5
2.	writing materials		50	2:1
3.	Charts		1	1:25
4.	PowerPoint presentations	For trainer's use		
5.	Whiteboard		1	1:25
6.	Assorted color of whiteboard markers	For trainer's use		
7.	Printers		1	1:25
8.	Projector		1	1:25
<b>B</b>	<b>Learning Facilities &amp; infrastructure</b>			
1.	Lecture/theory room		1	1:25
2.	Agriculture lab		1	1:25
	<b>Consumable materials</b>			
	Fertilizers	DAP, CAN, SSP, UREA	1-50kg bag	1:25
	Seeds	25kg/ha	1	1: 25
	Stem cuttings	1 tonne/ha	0.25	1:25
	Herbicides		1	1:25
	Pesticides		1	1:25
<b>C</b>	<b>Tools and Equipment</b>			
1.	Hoe		25	1:1
2.	Rake		25	1:1
3.	Machete		25	1:1
4.	Planters		1	1:25

5.	Harrows		1	1:25
6.	Dusters		1	1:25
7.	Chuff cutter		1	1:25