



**REPUBLIC OF KENYA**

**COMPETENCY-BASED MODULAR CURRICULUM**

**FOR**  
**AGRICULTURE AND EXTENSION LEVEL 6**  
**(CYCLE 3)**

**ISCED PROGRAMME CODE: 0811 554 A**



**TVET CDACC**  
**P.O. BOX 15745-00100 NAIROBI**

## **FORAGE CROPS PRODUCTION**

**UNIT CODE:** 0811 551 16A

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

**UNIT DURATION:** 120 HOURS

### **Relationship to Occupational Standards**

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.

### **Unit Description**

This unit specifies competencies required to produce forage crops

### **Summary of Learning Outcomes**

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

<b>S/No</b>	<b>Learning Outcomes</b>	<b>Duration (Hours)</b>
1.	Prepare planting materials	20
2.	Prepare crops seedbed	20
3.	Plant forage crops	20
4.	Manage forage crops	30
5.	Harvest forage crops	10
6.	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> <p><b>Practice</b></p> <p>2.7 Prepare crop seedbed</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>
3 Plant forage	<b>Theory</b>	<ul style="list-style-type: none"> <li>• Written tests</li> </ul>

crops	<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> <p><b>Practice</b></p> <p>3.5 establish forage crops</p>	<ul style="list-style-type: none"> <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	<p><b>Theory</b></p> <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> <p><b>Practice</b></p> <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	<p><b>Theory</b></p> <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> <p>5.2 Forage crops harvesting tools and equipment's</p> <p>5.2.1 Uses</p> <p>5.2.2 Maintenance</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>

	<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>	
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><b>6.3 Forage crops conservation</b></p> <p><b>6.4 Forage crops utilization records</b></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)
<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