

FARM STRUCTURES AND MECHANIZATION

ISCED UNIT CODE: 0811 541 10A

TVET CDACC UNIT CODE: HE/CU/AHP/CC/15/6/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply knowledge of farm structures and mechanization.

UNIT DURATION: 50 Hours

Unit Description

This unit specifies the competencies required by an animal health and production technologist in order to apply knowledge of farm structures and mechanization. It involves applying knowledge of farm structures, farm power, and knowledge of farm mechanization.

Summary of Learning Outcomes

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

S/No	Learning Outcomes	Duration (Hours)
1.	Apply knowledge of farm structures	20
2.	Apply knowledge on farm power	20
3.	Apply knowledge of farm mechanization	10
Total		50

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1. Apply knowledge of farm structures	1.1. Farm planning 1.2. Construction materials 1.2.1. Timber 1.2.2. Stone 1.2.3. Metal 1.2.4. Iron sheets	<ul style="list-style-type: none">• Written tests• Third party report• Projects• Interviews/ Oral questions

	<p>1.2.5. Sand</p> <p>1.2.6. Ballast</p> <p>1.2.7. Cement</p> <p>1.2.8. Nails</p> <p>1.3. Livestock structures</p> <p>1.3.1. Zero grazing unit</p> <p>1.3.2. Piggery</p> <p>1.3.3. Rabbitry</p> <p>1.3.4. Poultry unit</p> <p>1.4. Livestock restraining structures</p> <p>1.4.1. Crush</p> <p>1.4.2. Squeeze chute</p> <p>1.4.3. Dips and spray races</p> <p>1.4.4. Silo</p> <p>1.4.5. Store</p> <p>1.4.6. Fence</p>	<ul style="list-style-type: none"> • Case Studies • Practical
<p>2. Apply knowledge on farm power</p>	<p>2.1. Farm power</p> <p>2.1.1. Electricity</p> <p>2.1.2. Wind</p> <p>2.1.3. Biogas</p> <p>2.1.4. Fossil fuels</p> <p>2.1.5. Solar</p> <p>2.2. Farm power selection</p> <p>2.2.1. Tractor</p> <p>2.2.2. Animal power operation</p> <p>2.2.3. Solar power</p> <p>2.2.4. Human power</p>	<ul style="list-style-type: none"> • Written tests • Third party report • Projects • Interviews/ Oral questions • Case Studies • Practical
<p>3. Apply knowledge of farm mechanization</p>	<p>3.1. Farm mechanization</p> <p>3.2. Challenges of farm mechanization</p> <p>3.3. Farm machinery and equipment</p> <p>3.3.1. Chaff cutter</p> <p>3.3.2. Hay Bailing machine</p>	<ul style="list-style-type: none"> • Written tests • Third party report • Projects • Interviews/ Oral questions

	3.3.3. Knapsack sprayer	<ul style="list-style-type: none"> • Case Studies • Practical
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Suggested Methods of delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instructions

Training resources for 25 trainees

S/No.	Category/Item	Description/ Specification	Quantity	Recommended Ratio (Item: Trainee)
	Learning materials			
1.	Projector		1	1:25
2.	Whiteboard/Smart board		1	1:25
3.	Desktop/computer		1	1:25
4.	Lecture/Theory room		1	1:25
5.	Workshop		1	1:25
6.	Animal farm	As per KVB guidelines.	1	1:25
7.	Library		1	1:25
8.	E-Library		1	1:25
9.	Hay baler machine		1	1:25
10.	Knapsack sprayer		5	1:5
11.	Chaff cutter		1	1:25
12.	Tractor		1	1:25