

LIVESTOCK FEEDS PRODUCTION

UNIT CODE: 0811 351 01 A

TVET CDACC UNIT CODE: AGR/CU/AP/CR/01/4/MA

Relationship to Occupational Standards

This unit addresses the unit of competency: Produce Livestock Feeds

Duration of Unit: 100 Hours

UNIT DESCRIPTION

This unit specifies competencies required to produce livestock feeds. It involves producing livestock forage, conserving livestock forage, and formulating livestock feed rations.

Summary of Learning Outcomes

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

| S/No | Learning Outcomes | Duration (Hours) |
|--------------|-----------------------------|------------------|
| 1. | Produce livestock forage | 40 |
| 2. | Conserve livestock forage | 20 |
| 3. | Formulate livestock rations | 40 |
| Total | | 100 |

Learning Outcomes, Content and Suggested Assessment Methods

| Learning Outcome | Content | Suggested Assessment Methods |
|----------------------------|--|---|
| 1 Produce livestock forage | 1.1. Forage production tools and equipment 1.1.1. Grass cutters | <ul style="list-style-type: none">• Written assessment• Practical• Projects |

| | | |
|--|--|---|
| | <p>1.1.2. Generator</p> <p>1.1.3. Water pump with hose</p> <p>1.1.4. Tractors (optional)</p> <p>1.1.5. Plough and harrow</p> <p>1.1.6. Shovel</p> <p>1.1.7. Hoe</p> <p>1.1.8. Water sprinklers</p> <p>1.1.9. Planter</p> <p>1.1.10. Wheelbarro</p> <p>1.1.11. Hole digger</p> <p>1.1.12. Fencing materials</p> <p>1.2 Propagation materials</p> <p>1.2.1 Seeds</p> <p>1.2.2 Seedlings</p> <p>1.2.3 Cuttings</p> <p>1.2.4 Splits</p> <p>1.2.5 Tubers</p> <p>1.3 Land preparation</p> <p>1.3.1 Good Agricultural Practices (GAP)</p> <p>1.3.1.1 Liming</p> <p>1.3.1.2 Mulching</p> <p>1.4 Establishing propagation materials</p> <p>1.4.1 Direct sowing</p> <p>1.4.2 Broadcasting</p> <p>1.4.3 Transplant</p> <p>1.5 Forage management</p> <p>1.5.1 Pastures</p> <p>1.5.2 Fodder crops</p> | <ul style="list-style-type: none"> • Third party report • Portfolio of evidence • Oral questions |
|--|--|---|

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|--------------------------------|--|--|
| | 1.6 Harvesting of forage. | |
| 2. Conserve livestock forage | 2.1 Quality assessment of forage 2.2 Conservation of forages 2.2.1 Silage 2.2.2 Hay 2.3 Storage of forage 2.4 Forage production record 2.5 Waste management | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |
| 3. Formulate livestock rations | 3.1 Feed formulation tools and equipment 3.2 Animal feeds ingredients 3.2.1 Feed additives, 3.2.2 Bran 3.2.3 Mineral premixes 3.3 Sourcing of animal feeds ingredients 3.4 Weighing of animal feed ingredients 3.5 Feed formulation methods 3.5.1 Pearson square 3.5.2 Trial and error 3.5.3 Computation method 3.6 Packaging and storage of formulated feeds 3.7 Waste management | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

Suggested methods of delivery

- Practical
- Project
- Demonstration
- Group work and Discussions
- Direct instruction

Recommended Resources

| S/No. | Category/Item | Description/ Specifications | Quantity | Recommended Ratio (Item: Trainee) |
|----------|--|---|----------|---|
| A | Learning Materials | | | |
| 1. | Charts | Flip Charts Rules and Regulations | 5 | 1:5 |
| 2. | Markers | whiteboard markers and permanent markers | 5 | 1:5 |
| 3. | Video clips Audio tapes | MP4, MP3 | 5 | 1:5 |
| 4. | Newspapers and Handouts | Daily | 25 | 1:1 |
| 5. | Business Journals | Annual, Monthly, Daily | 25 | 1:1 |
| 6. | National Pig Development Programme Manual | updated | 5 | 1:5 |
| 7. | Breeder's manuals by breeders like Cobb and Issa Brown | updated | 5 | 1:5 |
| B | Learning Facilities & Infrastructure | | | |
| 8. | Lecture/Theory Room | (9* 8 sq. metres) | 1 | 1:25 |
| 9. | Internet Connection | WI-FI, Dial-Up, Cable, Fixed-wireless, | 1 | 1:25 |

| | | | | |
|----------|-----------------------------|--|------------|------|
| 10. | Forage farm | 1 | 1 | 1:25 |
| 11. | machinery | Tractor, mowers balers | 1 | 1:25 |
| C | Consumable Materials | | | |
| 12. | Flashcards | Alphabet, Numbers, Math | 25 | 1:1 |
| 13. | Stationery | Printing Papers, and Exercise Books Sizes A4, A3, A2 etc | 5 reams | 1:5 |
| D | Tools And Equipment | | | |
| 14. | Wheelbarrow | Any model | 1 | 1:25 |
| 15. | Scissors | LED.LCD, Laser | 5 | 1:5 |
| 16. | Hand drill | Glass, melamine, porcelain | 1 | 1:25 |
| 17. | Panga | Any five | 5 | 1:5 |
| 18. | Measuring tape | Any five | 5 | 1:5 |
| 19. | Spade | Any five | 5 | 1:5 |
| 20. | String/line | Any five | 5 | 1:5 |
| 21. | Surgical blades | In good condition | 5 | 1:5 |
| F | Specimens | | | |
| 22. | forage | Rhodes grass, lucerne | 5each type | 1:5 |