

PIG PRODUCTION

UNIT CODE: 0811 351 20A

TVET CDACC UNIT CODE: AGR/CU/AP/CR/07/4/MA

Relationship to Occupational Standards

This unit addresses the unit of competency: Carry Out Pig Production

Duration of Unit: 100 Hours

UNIT DESCRIPTION

This unit describes competencies required to carry out pig production. It involves constructing pig structures, feeding pigs, carrying out breeding, carrying out piglet rearing, performing routine management practices, performing pig slaughter, process pig products and by-products and market pig products.

Summary of Learning Outcomes

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

| S/No | Learning Outcomes | Duration (Hours) |
|--------------|--|------------------|
| 1. | Construct pig structures | 20 |
| 2. | Carry out pig feeding | 10 |
| 3. | Carry out pig breeding | 10 |
| 4. | Carry our piglet rearing | 10 |
| 5. | Perform pig routine management practices | 20 |
| 6. | Perform pig slaughter | 10 |
| 7. | Process pig products and by- products | 10 |
| 8. | Market pig products | 10 |
| Total | | 100 |

Learning Outcomes, Content and Suggested Assessment Methods

| Learning Outcome | Content | Suggested Assessment Methods |
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| 1. Construct pig structures | <p>1.1 Construction tools, equipment and materials</p> <p>1.1.1 Tools</p> <ul style="list-style-type: none"> • hammer • Screw drivers • tape measures • level • saw • drill • pliers • chisel <p>1.1.2 Equipment</p> <ul style="list-style-type: none"> • Bulldozer • Cranes • Dump trucks • Mixer • Forklifts <p>1.1.3 Materials</p> <ul style="list-style-type: none"> • Cement • Sand • Blocks • Quarry dust <p>1.2 Site selection for pig structure</p> <p>1.3 Construction of pig structure</p> <p>1.4 Maintenance of pig structures</p> | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

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| | <p>1.5 Construction and maintenance of pig structure records</p> <p>1.6 Waste management</p> | |
| <p>2. Carry out pig feeding</p> | <p>2.1 Feeding tools, equipment and materials</p> <ul style="list-style-type: none"> • Feed basins • Feed mixer • Hay feeders • Mineral feeders <p>2.2 Pig feeds</p> <ul style="list-style-type: none"> • Sow and weaner • Pig finisher • Pig starter • Creep feeds <p>2.3 Provision of basal rations</p> <p>2.4 Feed supplements</p> <ul style="list-style-type: none"> • Wheat bran • Creep feed • Mineral licks • Feed additives <p>2.5 Evaluation of feed intake</p> <p>2.6 Evaluation of feed conversion efficiency</p> <p>2.7 Pig feeding records</p> <p>2.8 Waste management</p> | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |
| <p>3. Carry out pig breeding</p> | <p>3.1 Pig breeding management tools, equipment and materials</p> <ul style="list-style-type: none"> • Heat detection | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report |

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| | <p>devices</p> <ul style="list-style-type: none"> • Insemination guns <p>3.2 Pig breeds</p> <ul style="list-style-type: none"> • Large white • Landrace • Duroc jersey • Berkshire <p>3.1 Selection of pig breeds</p> <p>3.2 Heat signs in Does</p> <p>3.3 Flushing</p> <p>3.4 Breeding methods and technologies</p> <ul style="list-style-type: none"> • A.1 • Synchronization • Cross breeding • Pure breeding • Inbreeding <p>3.8 Provision of care to pregnant does</p> <p>3.9 Steaming up</p> <p>3.10 Farrowing management</p> <p>3.11 Breeding records</p> | <ul style="list-style-type: none"> • Portfolio of evidence • Oral questions |
| <p>4. Carry our piglet rearing</p> | <p>4.1 Assembling of tools, equipment and materials</p> <p>4.2 Nutritional management applied on suckling sow and piglets</p> <ul style="list-style-type: none"> • Flushing • Steaming up | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

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| | <ul style="list-style-type: none"> • Fattening • Creep feeding <p>4.3 Environmental conditions maintained in piglet pens</p> <ul style="list-style-type: none"> • Temperature • Cleanliness • Humidity • Light <p>4.4 Health monitoring and management</p> <p>4.5 Piglets handling</p> <p>4.6 Preparation of Artificial colostrum</p> <p>4.7 Weighing of piglets</p> <p>4.8 Vaccination</p> <p>4.9 Iron supplementation</p> <p>4.10 Teeth clipping</p> <p>4.11 Docking</p> <p>4.12 Weaning management conduction</p> <p>4.13 Record maintenance</p> <p>4.14 Waste management</p> | |
| <p>5. Perform pig routine management practices</p> | <p>5.1 Pig identification methods</p> <ul style="list-style-type: none"> • Ear tags • Ear notching • Neck chains • Straps with numbers <p>5.2 Grooming performance</p> <p>5.3 Hygiene and sanitation</p> <p>5.4 Culling</p> | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

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| | <p>5.5 Control of internal and external parasites</p> <p>5.6 Isolation and quarantine</p> <p>5.7 Provision of clean water ad-libitum</p> <p>5.8 Records preparation</p> <p>5.9 Pig farm bio-security practices</p> <ul style="list-style-type: none"> • Foot bath • Quarantine • Pen disinfection • Equipment sterilization • Fencing | |
| <p>6. Perform pig slaughter</p> | <p>6.1 Slaughter tools, equipment and materials</p> <ul style="list-style-type: none"> • Knives • Stunners • Scalding tanks • Gabrel and hoists • Cutting boards and tables <p>6.2 Preparation of slaughter house/slab</p> <p>6.3 Pre-slaughter handling of pigs</p> <p>6.4 Perform humane slaughter of pigs</p> <p>6.5 Carcass dressing</p> | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

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| | <p>6.6 Offal cleaning</p> <p>6.7 Preservation of dressed meat</p> <p>6.8 Transportation of dressed meat</p> <p>6.9 Food safety and hygiene measures</p> <p>6.10 Handling of by-products</p> <p>6.11 Disposal of condemned materials and wastes</p> <ul style="list-style-type: none"> • Parasite infested organs • Dead foetus • Hydrated infested liver • Whole carcass <p>6.12 Cleaning of slaughter house and equipment</p> <p>6.13 Maintaining slaughter structures</p> <p>6.14 Record keeping</p> | |
| <p>7. Process pig products and by-products</p> | <p>7.1. Data collection tools</p> <p>7.2. Conducting market survey</p> <p>7.3. Preparation of market survey report</p> <p>7.4. Pig products</p> <ul style="list-style-type: none"> • Sausages | <ul style="list-style-type: none"> • Written assessment • Practical • Projects • Third party report • Portfolio of evidence • Oral questions |

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| | <ul style="list-style-type: none">• Bacon• Lard• Cuts• Brawn• Smokies• Burger <p>7.5. Permits and certificates</p> <ul style="list-style-type: none">• Movement permits• No objection permits• Meat inspection permits• Food and hygiene certificate• Meat transportation permit <p>7.6. Tools, equipment and materials for slaughter</p> <ul style="list-style-type: none">• Knives• Stunners• Scalding tanks• Gabrel and hoists• Cutting boards and tables <p>7.7. Production schedules development</p> <p>7.8. PPEs identification</p> <p>7.9. Identification of carcass for processing</p> <p>7.10. Processing of pig products</p> | |
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| | <p>7.11. Food safety and hygiene</p> <p>7.12. Packaging and storage of pig products</p> <p>7.13. Report on pig product and by-products marketing</p> <p>7.14. Waste management</p> | |
| 8. Market pig products | <p>3.1 Market survey</p> <p>3.2 Identification of marketing channels</p> <p>3.3 Development and implementation of marketing strategy</p> <p>3.4 Identification of products competitive advantage</p> <p>3.5 Product price</p> <p>3.6 Product outlets</p> <p>3.7 Contractual agreements undertaking</p> <ul style="list-style-type: none"> • Verbal • Written <p>3.8 Marketing strategy</p> <p>3.9 Report on pig products</p> | <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 for 25 trainees

| S/No. | Category/Item | Description/ Specifications | Quantity | Recommended Ratio (Item: Trainee) |
|----------|---|---|----------|---|
| A | Learning Materials | | | |
| 53. | Charts | Flip Charts Rules and Regulations | 5 | 1:5 |
| 54. | Markers | whiteboard markers and permanent markers | 50 | 1:1 |
| 55. | Video clips Audio tapes | MP4, MP3 | 5 | 1:5 |
| 56. | Newspapers and Handouts | Daily | 25 | 1:1 |
| 57. | Business Journals | Annual, Monthly, Daily | 25 | 1:1 |
| 58. | National Pig Development Programme Manual | updated | 5 | 1:5 |
| 59. | Breeder's manuals | updated | 5 | 1:5 |
| B | Learning Facilities & Infrastructure | | | |
| 60. | Lecture/Theory Room | (9* 8 sq. metres) | 1 | 1:25 |
| 61. | Internet Connection | WI-FI, Dial-Up, Cable, Fixed-wireless, | 1 | 1:25 |
| 62. | Drinkers | 1 | 1 | 1:25 |
| 63. | Feeding trough | 1 | 1 | 1:25 |
| 64. | Grass | 1 | 1 | 1:25 |
| 65. | Shrub | Well equipped | 1 | 1:25 |

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| 66. | | sufficient | | |
| C | Consumable Materials | | | |
| 67. | Flashcards | Alphabet, Numbers, Math | 25 | 1:1 |
| 68. | Stationery | Printing Papers, and Exercise Books Sizes A4, A3, A2 etc | 5 reams | 1:5 |
| D | Tools And Equipment | | | |
| 69. | Wheelbarrow | Any model | 1 | 1:25 |
| 70. | Scissors | LED.LCD, Laser | 5 | 1:5 |
| 71. | Hand drill | Glass, melamine, porcelain | 1 | 1:25 |
| 72. | Panga | Any five | 5 | 1:5 |
| 73. | Measuring tape | Any five | 5 | 1:5 |
| 74. | Spade | Any five | 5 | 1:5 |
| 75. | String/line | Any five | 5 | 1:5 |
| 76. | Surgical blades | | | |
| 77. | Ear Notchers | | | |
| 78. | Ear tags | | | |
| 79. | Neck chains | | | |
| 80. | Straps with numbers | | | |
| F | Specimens | | | |
| 1. | Pig breeds | large white, landrace, duroc,newhumpshire | 5each type | 1:5 |