

CARRY OUT POULTRY PRODUCTION

UNIT CODE: 0811 551 21A

TVET CDACC UNIT CODE: AGR/OS/AP/CR/08/4/MA

UNIT DESCRIPTION

This unit specifies competencies required to carry out poultry production. It involves constructing poultry structures, carrying out chick brooding, managing layer poultry, managing meat poultry, managing poultry slaughter, managing poultry breeding and marketing poultry products.

ELEMENTS AND PERFORMANCE CRITERIA

| ELEMENT | PERFORMANCE CRITERIA |
|---|--|
| These describe the key outcomes which make up workplace function. | These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range.</i> |
| 1. Construct poultry structures | <ul style="list-style-type: none">1.1 <i>Tools, equipment and materials</i> are assembled as per work requirements1.2 Site of <i>poultry structures</i> is selected based on LPM1.3 Poultry structures are designed according to Livestock Production Manual (LPM)1.4 Poultry structures are constructed based on livestock production manual1.5 Poultry structures are maintained as per workplace procedures1.6 Poultry structures construction and maintenance records are kept as per workplace requirements1.7 Waste is managed according to environmental protection regulations1.8 Necessary <i>poultry house equipment and material</i> are identified according to production system1.9 Poultry house equipment and materials are installed as per specifications in the <i>poultry production manual (PPM)</i> |

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| | <p>1.10 Poultry structures construction and maintenance records are kept as per workplace requirements</p> <p>1.11 Waste is managed according to environmental protection regulations</p> |
| 2. Carry out chick brooding | <p>2.1 Tools, equipment and materials are assembled as per work requirements</p> <p>2.2 Brooder is constructed as per poultry production guidelines</p> <p>2.3 Brooder and brooder equipment are disinfected as per poultry production guidelines</p> <p>2.4 Chick brooder equipment are set as per poultry production guidelines</p> <p>2.5 Microclimate is monitored as per workplace requirements</p> <p>2.6 Brooding chicks are fed as per the poultry production guidelines</p> <p>2.7 Bio-safety structures/facilities are set as per workplace requirements</p> <p>2.8 Brooding chicks are vaccinated as per the vaccination schedule</p> <p>2.9 Predator control is executed as per workplace requirements</p> <p>2.10 Chick brooding records are kept as the PPM</p> <p>2.11 Waste is managed according to environmental protection regulations</p> |
| 3. Manage Layer Poultry | <p>3.1 Tools, equipment and materials are assembled as per work requirements</p> <p>3.2 Layers house sanitization procedures are performed as per manufacturer's guidelines</p> <p>3.3 Micro climate is monitored as per workplace requirements</p> <p>3.4 Layer poultry are fed as per the poultry production guidelines</p> <p>3.5 Layer poultry are vaccinated as per the vaccination schedule</p> <p>3.6 Post-vaccination behaviour is monitored as per workplace requirements</p> |

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| | <p>3.7 Table poultry eggs are collected as per workplace requirements</p> <p>3.8 Table poultry eggs are Sorted and graded as per poultry production manual</p> <p>3.9 Table poultry eggs are cleaned as per poultry production manual</p> <p>3.10 Table poultry eggs are packaged as per workplace requirements</p> <p>3.11 Table poultry eggs are branded based on the KEBS specifications</p> <p>3.12 Layer poultry records are kept as the PPM</p> <p>3.13 Waste is managed according to environmental protection regulations</p> |
| 4. Manage meat poultry | <p>4.1 Tools, equipment and materials are assembled as per work requirements</p> <p>4.2 Meat poultry house sanitization procedures are performed as per manufacturer's guidelines</p> <p>4.3 Micro climate is monitored as per workplace requirements</p> <p>4.4 Meat poultry are fed as per the poultry production guidelines</p> <p>4.5 Meat poultry are vaccinated as per the vaccination schedule</p> <p>4.6 Post-vaccination behavior is monitored as per workplace requirements</p> <p>4.7 Meat poultry is caught as per workplace requirements</p> <p>4.8 Meat poultry is weighed and sorted as per market requirement</p> <p>4.9 Packaging and loading of meat poultry is carried out as per animal welfare guidelines</p> <p>4.10 Meat poultry is recorded as per workplace requirements</p> <p>4.11 Meat poultry is dispatched as per animal welfare guidelines</p> <p>4.12 Meat poultry records are kept as the PPM</p> <p>4.13 Waste is managed according to environmental protection regulations</p> |

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| 5. Manage Poultry Slaughter | <p>5.1 Tools, equipment and materials are assembled as per work requirements</p> <p>5.2 Poultry for slaughter is selected as per the poultry farm regulations</p> <p>5.3 Ante-mortem inspection is performed based on the veterinary regulations</p> <p>5.4 Poultry is slaughtered as per poultry slaughtering procedure</p> <p>5.5 Cleaned eviscerated poultry carcass is chilled as per poultry slaughtering procedure</p> <p>5.6 Poultry carcass is chilled and graded as per workplace requirements</p> <p>5.7 Portioned poultry meat is packaged as per the workplace procedures</p> <p>5.8 Poultry slaughter records are kept as the PPM</p> <p>5.9 Waste is managed according to environmental protection regulations</p> |
| 6. Manage Breeding Poultry | <p>6.1 Tools, equipment and materials are assembled as per work requirements</p> <p>6.2 Mating and breeding systems are designed in accordance with farm preferences and desired mating ratios</p> <p>6.3 Breeding poultry are selected in accordance with the poultry production manual (PPM) and poultry welfare regulations</p> <p>6.4 Selected breeding poultry are mated as per designed mating and breeding systems</p> <p>6.5 Breeding poultry are fed as per the poultry production guidelines</p> <p>6.6 Breeding poultry are vaccinated as per the vaccination schedule</p> <p>6.7 Post-vaccination behavior is monitored as per workplace requirements</p> |

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| | 6.8 Collected eggs in trays are fumigated in the farm fumigation chamber according to procedures described in the PPM 6.9 Poultry eggs are sorted and stored according to <i>regulatory body standards</i> 6.10 Selected eggs for hatching are transported to the hatchery according to PPM 6.11 Breeding poultry records are kept as the PPM 6.12 Waste is managed according to environmental protection regulations |
| 7. Market poultry products | 7.1 Market survey is conducted based on Standard Survey guidelines 7.2 <i>Poultry products</i> are sold based on market demands 7.3 Meat poultry is transported to the market based on Animal 7.4 Marketing records are maintained based on the organization's record management guidelines |

RANGE OF VARIABLES

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

| RANGE | VARIABLE |
|---|---|
| 1. Poultry structures may include but not limited to: | <ul style="list-style-type: none"> • Brooder • Grower house • Layer's house • Broiler house • Feed store • Slated floors • Cages |

| RANGE | VARIABLE |
|--|---|
| | <ul style="list-style-type: none"> • Pallets |
| 2. Tools, equipment and materials may include but not limited to: | <ul style="list-style-type: none"> • Waterers • Feeders • Thermometer (maximum – minimum) • Heat sources • Litter material • Curtains • False ceilings • Hygrometer |
| 3. Poultry production manual (PPM) may include but not limited to: | <ul style="list-style-type: none"> • National Poultry Development Programme Manual • Breeder's manuals by breeders like Cobb and Issa Brown |
| 4. Chick brooder equipment and Tools may include but not limited to: | <ul style="list-style-type: none"> • Brooder thermometer • Charcoal jiko • Infra-red bulb • Gas burner • Kerosene lamp • Chick feeder • Chick drinker • Hygrometer |
| 5. Bio-safety structures/facilities includes but not limited to: | <ul style="list-style-type: none"> • Foot bath • Sanitizer • Fence |
| 6. Regulatory body standards include but is not limited to: | <ul style="list-style-type: none"> • Standards by bodies like: • Kenya Bureau of Standards (KEBS) • State Directorate of Veterinary Services (SDVS) |
| 7. Poultry products includes but is not limited to: | <ul style="list-style-type: none"> • Eggs • Poultry meat • Feathers • Manure • Offal |

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Communication skills
- Problem solving
- Organizational skills
- Time management
- Listening skills
- Critical thinking
- Negotiation
- Data collection
- Digital literacy
- Analytical skills

Required knowledge

The individual needs to demonstrate knowledge of:

- Anatomy and physiology of the poultry reproductive system
- Breeding systems
- Selection criteria for breeding poultry
- Poultry selection and breeding
- Animal nutrition
- Parasite and disease management in poultry
- Marketing poultry and eggs
- Egg handling
- Egg sorting
- Egg storage
- Feeding strategies, systems and regimes
- Mating systems
- Nutritional composition of feed materials
- Poultry feed intake
- Poultry housing requirements

- Poultry identification methods
- Poultry Immunology
- Poultry nutritional requirements
- Poultry spacing requirements
- Poultry welfare
- Reconstitution of vaccines
- Record keeping
- Refrigeration methods
- Restraining methods
- Selection and culling criteria
- Stocking density
- Traits of economic importance in poultry
- Types and breeds of poultry
- Types and functions of nutrients
- Types of drinkers and waterers
- Types of feed additives
- Types of poultry records
- Types of vaccines
- Vaccinology
- Water quality

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

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| 1. Critical aspects of competency | <p>Assessment requires evidence that the candidate:</p> <p>1.1 Constructed poultry structure as per the design and type of construction materials</p> <p>1.2 Installed poultry house equipment and materials as per specifications in the <i>poultry production manual (PPM)</i> Collected data as per statistical manual</p> <p>1.3 Mated breeding poultry as per designed mating and breeding systems</p> |
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| | <p>1.4 Fed poultry as per the poultry production guidelines</p> <p>1.5 Vaccinated poultry as per the vaccination schedule</p> <p>1.6 Monitored microclimate as per workplace requirements</p> <p>1.7 Stored eggs for incubation at a correct temperature in preparation for incubation in accordance with PPM guidelines</p> <p>1.8 Carried out packaging and loading of meat producing poultry as per animal welfare guidelines</p> <p>1.9 Slaughtered poultry as per poultry slaughtering procedure</p> <p>1.10 Chilled and graded poultry carcass as workplace requirements</p> <p>1.11 Packaged portioned poultry meat as per workplace procedures</p> <p>1.12 Kept records as per the LPM</p> <p>1.13 Managed wastes according to environmental protection regulations</p> |
| 2. Resource implication | <p>The following resources should be provided:</p> <p>2.1 Appropriately simulated environment where assessment can take place</p> <p>2.2 Access to relevant workplace assessment environment</p> <p>2.3 Resources relevant to the proposed assessment activity or tasks</p> |
| 3. Method of assessment | <p>Competency in this unit may be assessed through:</p> <p>3.1 Projects</p> <p>3.2 Observation</p> <p>3.3 Written tests</p> <p>3.4 Questionnaires</p> <p>3.5 Oral questioning</p> |
| 4. Context of assessment | <p>Competency elements may be assessed</p> <p>4.1 On the job</p> <p>4.2 In a simulated environment</p> |
| 5. Guidance information for assessment | <p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p> |