

# PRODUCE CONVECTIONAL AND NON-CONVECTIONAL LIVESTOCK

**UNIT CODE:** AGR/OS/EXT/CR/01/6/A

## UNIT DESCRIPTION

This unit specifies competencies required to produce convectional and non-convectional livestock. It involves selecting breeding stock, designing animal structures, constructing animal structures, installing and maintaining livestock tools, equipment and machines, breeding convectional and non-convectional live stocks, practicing livestock husbandry and managing young and growing stocks.

## ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b> These describe the key outcomes which make up workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements which specify the required level of performance for each of the elements. <i><b>Bold and italicized terms are elaborated in the Range.</b></i>
1. Select breeding stock	1.1 Breeding stocks are chosen according to breeding standards. 1.2 <b><i>Breeding methods</i></b> are identified according to intended breeder outcome. 1.3 Tools and equipment are chosen and prepared according to the requirement of the breeding operation. 1.4 Breed selection is done according to standard selection methods. 1.5 Breeding is done according to the set criteria in the livestock production manual.
2. Design and construct farm structures	2.1 Animal structures are designed according to animal housing plan. 2.2 Structure and maintenance materials are identified and gathered according to animal housing plan. 2.3 Animal structures are constructed according to animal housings plan in accordance to livestock production manual.
3. Install and maintain livestock tools, equipment and machines	3.1 Tools, equipment and machines are assembled as per manufactures manual 3.2 Tools, equipment and machines are fitted as per the housing plan and requirement 3.3 Tools, equipment and machines are cleaned as per manufactures manual. 3.4 Tools, equipment and machines are sharpened as per manufactures manual. 3.5 Tools, equipment and machines are greased or oiled as per manufactures manual. 3.6 Tools, equipment and machines are replaced as per the work policy.

4. Breed farm animals	4.1 Livestock routine management practices are identified based on animal type and category. 4.2 Livestock are prepared for breeding as per livestock production manual. 4.3 Livestock are bred in accordance with livestock production manual
5. Practice livestock husbandry	5.1 Livestock structures requirement are adhered to according to animal species specified in LPM. 5.2 Livestock are housed based on LPM. 5.3 Livestock structures are cleaned, disinfected or fumigated as per LPM. 5.4 Personal protective equipment is adhered to as per occupation safety and health standards 5.5 Bio-security measures are adhered to according to animal disease handbook and LPM
6. Manage young and growing stocks	1.1 Young stocks are weighed as per manufacturer's specification. 1.2 Young stocks are fed as per the guidelines in LPM 1.3 Young stock is weaned following procedures stipulated in LPM. 1.4 Young stocks are housed according to breed and age as per LPM 1.5 Growing stock are housed separately as per LPM 1.6 Growing stocks are fed according to the feeding standards as per feeding standards tables. 1.7 Fully grown stocks are assessed for breeding in accordance with LPM

### 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. Breeding methods may include but not limited to:	<ul style="list-style-type: none"> <li>• Natural mating</li> <li>• Artificial breeding</li> <li>• Embryo transfer</li> <li>• Cross breeding</li> <li>• Inbreeding etc.</li> </ul>
2. selection methods may include but not limited to:	<ul style="list-style-type: none"> <li>• Mass selection</li> <li>• Progeny testing</li> <li>• Family selection</li> <li>• Pedigree</li> <li>• Multiple trait selection</li> </ul>

	<ul style="list-style-type: none"> <li>• Tandem</li> <li>• Independent culling levels</li> <li>• Index selection</li> </ul>
3. Animal structures	<ul style="list-style-type: none"> <li>• Calf pen</li> <li>• Zero-grazing unit</li> <li>• Crutch</li> <li>• Pig sty</li> <li>• Deep litter house</li> <li>• Weigh bridge</li> <li>• Dips / spray race etc.</li> </ul>
4. Livestock routine management practices	<ul style="list-style-type: none"> <li>• Feeding and watering</li> <li>• Milking</li> <li>• Spraying</li> <li>• Drenching</li> <li>• Hoof trimming</li> <li>• Dehorning or disbudding</li> <li>• Teeth clipping</li> <li>• Shearing</li> <li>• Cleaning and disinfection etc.</li> </ul>
5. Personal protective equipment	<ul style="list-style-type: none"> <li>• Overall or over coat</li> <li>• Gumboots</li> <li>• Gloves</li> <li>• Head gear</li> <li>• Face mask etc.</li> </ul>
6. Bio-security measures	<ul style="list-style-type: none"> <li>• Personal hygiene</li> <li>• Fencing</li> <li>• Quarantine</li> <li>• Foot baths</li> <li>• Prevention of intruders in animal houses</li> <li>• Cleaning and disinfection etc.</li> </ul>

## 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:

- Breed assessment
- Handling tools and equipment
- Animal breeding
- animal structure design
- Construction
- Installation
- Animal handling

- weighing
- feeding
- animal assessment

### Required knowledge

The individual needs to demonstrate knowledge of:

- Types of breeds
- Animal behavior
- Types of livestock
- Farm animal structures designs
- Procurement
- Maintenance of tools and equipment.
- Measurement
- Construction
- Knowledge in tool, equipment and machines
- Animals production
- Handling of animals
- Preparing animals for breeding
- Animal measurement
- Breeding behavior
- Pre-breeding feeding
- Environment hygiene and safety
- Animal health {Parasite control, vaccination and deworming. }
- Types of livestock structures
- Livestock structures hygiene and safety
- Types of personal protective equipment
- Bio-security measures
- Weighing young stock
- Weaning procedures
- Housing
- Assessment of growing stock for breeding.
- Feeding young and growing stock.
- Types of feeds for different animal species

### EVIDENCE GUIDE

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

<p>1. Critical aspects of competency</p>	<p>Assessment requires evidence that the candidate: Demonstrated:</p> <ul style="list-style-type: none"> <li>1.1 Ability to choose breeding stocks</li> <li>1.2 Understanding of breeding methods</li> <li>1.3 Ability to select breeds</li> <li>1.4 Ability to design animal structures</li> </ul>
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	<ul style="list-style-type: none"> <li>1.5 Ability to construct animal structures</li> <li>1.6 Ability to install and maintain animal tools and equipment</li> <li>1.7 Ability to carry out livestock routine management practices</li> <li>1.8 Ability to use personal protective equipment</li> <li>1.9 Understanding of bio-security measures</li> </ul>
2. Resource implication	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> <li>2.1 Materials, tools and equipment</li> <li>2.2 Assessment location</li> <li>2.3 Personal protective equipment</li> <li>2.4 Various types livestock</li> </ul>
3. Method of assessment	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> <li>3.1 Projects</li> <li>3.2 Observation</li> <li>3.3 Written tests</li> <li>3.4 Questionnaires</li> <li>3.5 Oral questioning</li> </ul>
4. Context of assessment	<ul style="list-style-type: none"> <li>4.1 Competency elements must be assessed in a safe working environment</li> <li>4.2 Assessment may be conducted in a workplace or simulated environment</li> </ul>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>