

## PRODUCE PIG FEEDS

**ISCED UNIT CODE:** 0811 251 03 A

**TVETCDACC UNIT CODE:** AGR/OS/PP/CR/03/3/MA

### UNIT DESCRIPTION

This unit covers the competencies required to participate in the production of pig feeds. It involves receiving and storing feed formulation raw materials; and compounding and storing feed rations. It also entails marketing and selling pig feeds.

This standard applies in the pig production industry.

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b> These describe the key outcomes that makeup workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements that 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. Receive and store feed compounding raw materials	1. 1 Goods delivery note is counter-checked and signed based on organizations' procurement policy and workplace instructions. 1. 2 <i><b>Feed compounding raw materials</b></i> are received as per organizations' procurement policy and workplace instructions. 1. 3 Stores inventory is developed based on organizations' procurement policy and workplace instructions. 1. 4 <i><b>Feed compounding resources</b></i> are issued based on feed processing activities and workplace instructions. 1. 5 Goods issue notes are prepared based on types of items issued and workplace instructions. 1. 6 Feed formulation raw materials are stored based on type and their <i><b>storage requirements</b></i> .

<b>ELEMENT</b> These describe the key outcomes that makeup workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements that specify the required level of performance for each of the elements.  <i><b>Bold and italicized terms are elaborated in the Range.</b></i>
2. Compound feed ration	2.1 Pig feed formula is acquired based on the <i><b>pig feed type</b></i> to produce 2.2 Feed ingredients are quantified and weighed based on acquired formula and workplace instructions. 2.3 Feed ingredients are <i><b>pre-prepared</b></i> based on type, form and workplace instructions. 2.4 Ingredients are mixed, weighed and packaged and labeled based on workplace instructions. 2.5 Pig feeds are stored based on type and products' storage requirements. 2.6 Conditions of Pig feeds and raw materials are periodically monitored for quality 2.7 Wastes are managed and disposed based on <i><b>environmental protection regulations</b></i> and workplace instructions. 2.8 <i><b>Feed compounding tools and equipment</b></i> are identified and used based on user and workplace instructions. 2.9 Personal protective equipment( <i><b>PPEs</b></i> ) are identified and used based on <i><b>legal requirements</b></i> and workplace instructions. 2.10 Feed processing records are kept and maintained based on workplace instructions.
3. Market and sell pig feeds	3.1 Pig feeds are marketed based on workplace instructions. 3.2 Clients' are identified and pig feeds delivered based on workplace instructions. 3.3 Pig feeds are sold based on workplace instructions. 3.4 Pig feed inventory records are kept as per workplace instruction 3.5 Pig feeds delivery records are kept and maintained as per workplace instructions.

## 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.

VARIABLE	RANGE
1. Feed formulation raw materials May include but not limited to:	<ul style="list-style-type: none"><li>• Grains</li><li>• Oil seeds products</li><li>• Root crop products</li><li>• Legumes</li><li>• Grain products</li><li>• Animal products</li><li>• Vitamins</li><li>• Minerals</li><li>• Ashes</li><li>• Premixes (mineral and vitamin)</li><li>• Amino acids</li><li>• Additives (microbial, enzymes, buffers, toxin binders, sweeteners)</li></ul>
2. Feed formulation resources May include but not limited to:	<ul style="list-style-type: none"><li>• Finances</li><li>• Human resource</li><li>• Infrastructure</li></ul>
3. Storage requirements May include but not limited to:	<ul style="list-style-type: none"><li>• Dry place</li><li>• Dark place</li><li>• Cool dry place</li></ul>
4. Pig feed types May include but not limited to:	<ul style="list-style-type: none"><li>• Starter/creep</li><li>• Growers</li><li>• Sow and weaner</li><li>• Pig finisher/fattener</li></ul>
5. Environmental protection regulations May include but not limited to:	Guidelines by authorities like; <ul style="list-style-type: none"><li>• NEMA</li><li>• Public Health departments</li></ul>
6. Pre-prepared May include but not	<ul style="list-style-type: none"><li>• Roasting</li><li>• Drying</li></ul>

<b>VARIABLE</b>	<b>RANGE</b>
limited to:	<ul style="list-style-type: none"> <li>• Milling</li> <li>• Grinding</li> <li>• Extrusions</li> <li>• Boiling</li> <li>• Soaking</li> <li>• Fermentation</li> </ul>
7. Feed compounding tools, equipment and supplies May include but not limited to:	<ul style="list-style-type: none"> <li>• Feed mixers</li> <li>• Hammer mill</li> <li>• Weighing machines</li> <li>• Shovel</li> <li>• Bagging and sealing machine</li> <li>• Sacks</li> <li>• Buckets</li> <li>• Labels</li> <li>• Feed trolleys</li> <li>• Hard brushes</li> <li>• Hard blooms</li> <li>• Labels and logos</li> </ul>
8. PPEs May include but not limited to:	<ul style="list-style-type: none"> <li>• Nose masks</li> <li>• Ear muffs</li> <li>• Overall</li> <li>• Helmet</li> <li>• Safety boots</li> <li>• Dust coat</li> <li>• Gloves</li> </ul>
9. Legal requirements May include but not limited to:	<ul style="list-style-type: none"> <li>• Occupational safety and health Act 2007</li> <li>• International Labour organization regulations</li> <li>• Factories Act Cap 514</li> <li>• Public health Cap 242</li> <li>• KEBS</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:

- Communication
- Analytical
- Problem solving
- Decision making
- Critical thinking
- Basic research
- Mixing
- Weighing
- Batching
- Machine operation and maintenance

### Required knowledge

The individual needs to demonstrate knowledge of:

- Technology of livestock feed production
- Classification feed ingredients
- Waste management and disposal
- Feed manufacturing tools and machinery
- Handling and storage of raw materials and finished products
- Statutory regulations regarding livestock feed production

## EVIDENCE GUIDE

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

1. Critical aspects of Competency	<p>Assessment requires evidences that the candidate:</p> <ol style="list-style-type: none"><li>1. 1Recorded and stored feed compounding raw materials appropriately.</li><li>1. 2Developed a comprehensive stores inventory.</li><li>1. 3Monitored utilization of feed formulation raw materials.</li><li>1. 4Stored feed formulation raw materials appropriately.</li><li>1. 5Carried out feed compounding raw materials pre-preparation correctly and appropriately.</li><li>1. 6Carried out feed compounding activities correctly.</li><li>1. 7Managed and disposed wastes appropriately.</li><li>1. 8Stored processed pig feeds appropriately.</li></ol>
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	<p>1. 9 Kept and maintained pig feeds processing records.</p> <p>1. 10 Marketed and sold pig feeds and maintained sales records.</p> <p>1. 11 Demonstrated understanding of livestock nutritional requirements.</p> <p>1. 12 Demonstrated understanding of technology of livestock feed production.</p> <p>1. 13 Demonstrated understanding of composition of feed ingredients</p> <p>1. 14 Demonstrated understanding of storage of raw materials and finished products</p> <p>1. 15 Demonstrated understanding of statutory regulations regarding livestock feed production</p>
2. Resource Implication for competence certification	<p>The following resources <b>MUST</b> be provided:</p> <p>2.7 Access to a relevant workplace where assessment can take place</p> <p>2.8 Appropriately simulated environment where assessment can take place</p> <p>2.9 Materials relevant to the proposed activity or tasks</p>
3. Methods of Assessment	<p>Competency may be assessed through:</p> <p>3.1 Observation</p> <p>3.2 Written test</p> <p>3.3 Interview</p> <p>3.4 Oral questions</p> <p>3.5 Third party report</p>
4. Context for Assessment	<p>Assessment may be conducted in:</p> <p>4.1 On-the-job</p> <p>4.2 Off-the-job</p> <p>4.3 Workplace attachment</p>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>