

## PRODUCE ANNUAL CROPS

**UNIT CODE:** 0811 351 02 A

**TVET CDACC UNIT CODE:**

AGR/OS/EXT/CR/02/4/MA

### UNIT DESCRIPTION

This unit specifies competencies required to produce annual crops. It involves preparing land, establishing and managing selected annual crops. It also involves harvesting and storage as well as processing and marketing of the selected annual crops

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b> These describe the <b>key outcomes</b> which makeup <b>work place function.</b>	<b>PERFORMANCE CRITERIA</b> These are <b>assessable</b> 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. Prepare planting materials	1.1 <i><b>Personal protective equipment</b></i> is donned as per work requirement 1.2 Tools and equipment are assembled as per work requirement 1.3 <i><b>Planting materials</b></i> are obtained as per crop requirement
2. Prepare crop seedbed	2.1 Personal protective equipment is donned as per work requirement 2.2 <i><b>Land preparation tools</b></i> and <i><b>equipment</b></i> are assembled as per work requirement 2.3 Land is cleared as per agronomic requirements 2.4 <i><b>Tillage operations</b></i> are carried out as per agronomic requirements 2.5 <i><b>Soil conservation measures</b></i> are applied as per work procedure 2.6 Seedbed preparation records are prepared as per work procedure

3. Plant Annual crops	<p>3.1 Personal protective equipment is donned as per work requirement</p> <p>3.2 <b>Farm inputs</b> are assembled as per work requirement</p> <p>3.3 Annual crop is established as per crop requirements</p> <p>3.4 Planting records are prepared as per work procedure</p>
4. Manage Annual crops	<p>4.1 Personal protective equipment is donned as per work requirement</p> <p>4.2 Farm inputs are assembled as per work requirement</p> <p>4.3 <b>Field management practice</b> is carried out as per crop agronomic requirements</p> <p>4.4 Management records are prepared as per work procedure</p>
5. Harvest Annual crops	<p>1.1 Personal protective equipment is donned as per work requirement</p> <p>1.2 <b>Harvesting tools and equipment</b> are assembled as per work requirement</p> <p>1.3 Maturity indices are applied in determining crop maturity as per market demand</p> <p>1.4 <b>Harvesting method</b> is applied as per crop requirement</p> <p>1.5 Harvest records are prepared as per work procedure</p>
6. Process annual crop products	<p>6.1 Personal protective equipments donned as per work requirement</p> <p>6.2 <b>Processing tools, equipment and machines</b> are assembled as per work requirement</p> <p>6.3 Processing of annual crop is carried out as per work procedure</p> <p>6.4 Products are marketed as per workplace procedure</p> <p>6.5 Processing Records are prepared as per work procedure</p>

### RANGE

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

1. Personal protective equipment includes but not limited to:	<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</li> </ul>
2. Land preparation tools and equipment includes but not limited to:	<ul style="list-style-type: none"> <li>○ <b>Tools</b> <ul style="list-style-type: none"> <li>• Land clearing tools/equipment/machinery</li> <li>• Axes</li> <li>• Panga</li> <li>• Rake</li> <li>• Slasher</li> <li>• Tillage tools/equipment/machinery</li> <li>• Fork jembe</li> <li>• Harrows</li> <li>• Hoe</li> <li>• Tractor</li> </ul> </li> <li>○ <b>Equipment</b> <ul style="list-style-type: none"> <li>• Mower</li> <li>• Rotavator</li> <li>• Wheelbarrow</li> <li>• Ridgers</li> <li>• Moulboard plough</li> <li>• Disc plough</li> <li>• Disc harrow</li> </ul> </li> </ul>
3. Planting materials includes but not limited to:	<ul style="list-style-type: none"> <li>• Seeds and seedlings</li> <li>• Splits</li> <li>• Crowns</li> <li>• Slips, cuttings and sucker</li> </ul>

4. Tillage operations include but not limited to;	<ul style="list-style-type: none"> <li>• Primary cultivation</li> <li>• Secondary cultivation</li> <li>• Tertiary operations</li> </ul>
5. Soil conservation measures include but not limited to;	<ul style="list-style-type: none"> <li>• Contour planting</li> <li>• Terraces</li> <li>• Gabbions</li> <li>• Mulching</li> <li>• Cover cropping</li> <li>• Minimum tillage</li> <li>• Crop rotation</li> <li>• Intercropping</li> </ul>
6. Farm inputs includes but not limited to;	<ul style="list-style-type: none"> <li>• Fertilizers</li> <li>• Seeds</li> <li>• Vegetative propagation materials</li> <li>• Manures</li> </ul>
7. Field management practices include but are not limited to:	<ul style="list-style-type: none"> <li>• Watering</li> <li>• Mulching</li> <li>• Gapping</li> <li>• Thinning</li> <li>• Crop protection from weeds, pests and diseases</li> <li>• Training</li> <li>• Fertilizer application</li> <li>• Pruning</li> </ul>
8. Harvesting tools and equipment include but not limited to;	<ul style="list-style-type: none"> <li>• Sickle</li> <li>• Axe</li> <li>• Harrow</li> <li>• Chopper</li> </ul>

9. Harvesting methods include but not limited to;	<ul style="list-style-type: none"> <li>• Hand picking</li> <li>• Use of tools</li> <li>• Use of machinery</li> </ul>
10. Annual crops include but not limited to:	<ul style="list-style-type: none"> <li>• wheat</li> <li>• Rice</li> <li>• Maize</li> <li>• Millet</li> <li>• Sorghum</li> <li>• Beans</li> <li>• Soya</li> <li>• Beans</li> <li>• Pigeon peas</li> <li>• Sunflower</li> <li>• Cotton</li> <li>• Tobacco</li> <li>• Sweet potatoes</li> <li>• Cassava</li> </ul>
11. Records include but not limited to;	<ul style="list-style-type: none"> <li>• Inventory records</li> <li>• Financial records</li> <li>• Yield and production records</li> <li>• Payroll and labour records</li> <li>• Farm input utilization record</li> </ul>
12. Processing tools and equipment include but not limited to;	<ul style="list-style-type: none"> <li>• Blender</li> <li>• Motar and pestle</li> <li>• Weighing scale</li> <li>• Knives/cutting materials</li> <li>• Weighing cup</li> <li>• Bowl choppers</li> <li>• bandsaws</li> </ul>

	<ul style="list-style-type: none"> <li>• slicers</li> <li>• Marinating vacuum tumblers</li> <li>• Peelers</li> </ul>
--	--

## **REQUIRED KNOWLEDGE AND SKILLS**

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

### **Required skills**

The individual needs to demonstrate the following skills:

- Tilling
- Tools and equipment classification
- Measuring
- Leveling
- Gaping
- Pruning
- Spraying
- Pests , diseases and nutrients deficiency scouting
- Equipment calibration
- Technical Report writing
- Produce handling
- Soil conservation
- Observation
- Negotiation
- Digital literacy

### **Required knowledge**

The individual needs to demonstrate knowledge of:

- Sources of quality water
- Agro- Ecological Zonation
- Farm establishment and management
- Types of annual crops and physiology of different annual crops

- Types of tools and equipment used in production of annual crops
- Soil fertility and soil conservation
- Phyto-sanitary requirements
- Good Agricultural Practices
- Sources of quality planting materials for annual crops
- Husbandry practices in annual crops production
- Maturity indices in annual crops
- Harvesting and Post Harvesting Handling of annual crops
- Accounting principles, farm records and reports
- Waste Management
- Occupational Safety and Health Procedures

easyvet.com