

## ESTABLISHING AGRICULTURAL CROPS

**ISCED UNIT CODE:** 0811 351 03B

**UNIT CODE:** AGR/CU/EXT/CR/01/4/B

### RELATIONSHIP TO OCCUPATIONAL STANDARDS:

This unit addresses the unit of competency: Establish Agricultural Crop

**DURATION OF UNIT:** 120 hours

### UNIT DESCRIPTION

This unit specifies the competencies required to establish agricultural crop. It involves This unit describes the competencies required by a trainee in order to competently establish agricultural crop.it involves, preparing the land, establishing the crop, managing the crop and completing crop establishment

### SUMMARY OF LEARNING OUTCOMES

1. Prepare the land
2. Establish the crop
3. Manage the crop
4. Complete crop establishment

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Methods of assessment
1. Prepare the land	<ul style="list-style-type: none"><li>• Introduction to land preparation:<ul style="list-style-type: none"><li>• Characteristics of crops</li><li>• Farm plan (choice of crop)</li><li>• Condition of the land (virgin, under fallow, under previous crop).</li><li>• Stages of land preparation (clearing, primary, secondary and tertiary)</li><li>• Land preparation tools. Equipment and materials</li><li>• Farm power</li><li>• Soil analysis</li><li>• Soil conservation</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Oral questions</li><li>• Demonstration</li><li>• Third party report</li><li>• Observation</li><li>• Written tests</li></ul>

	<ul style="list-style-type: none"> <li>• Farm tools and equipment (types, use, repair and maintenance)</li> <li>• forms of agriculture</li> <li>• Soil sampling (definition, methods and procedure)</li> </ul>	
2. Establish the crop	<ul style="list-style-type: none"> <li>• Timing for planting (factors to consider e.g. ecological zone)</li> <li>• Certified planting materials (seeds and vegetative propagation materials)</li> <li>• Soil fertility (definition, nutrients, role in plant growth, deficiency symptoms and correction of deficiency)</li> <li>• Planting methods</li> <li>• Planting tools, equipment and machinery (types, use, repair and maintenance)</li> <li>• Spacing, depth and seed rate requirement</li> <li>• Phyto-sanitary requirements</li> <li>• Good Agricultural Practices</li> <li>• Emerging farming technologies.</li> <li>• Gapping and thinning</li> <li>• Soil and water conservation methods</li> <li>• Irrigation methods</li> </ul>	<ul style="list-style-type: none"> <li>• Oral questions</li> <li>• Demonstration</li> <li>• Third party report</li> <li>• Observation</li> <li>• Written tests</li> </ul>
3. Manage the crop	<ul style="list-style-type: none"> <li>• weeds and pest control methods: <ul style="list-style-type: none"> <li>• Definition</li> <li>• Types</li> <li>• Economic importance</li> <li>• Weed control methods</li> </ul> </li> <li>• Crop management tools, equipment and machines (type, use, repair and maintenance)</li> <li>• Gapping and thinning</li> <li>• Soil and water conservation methods</li> <li>• Irrigation methods</li> </ul>	<ul style="list-style-type: none"> <li>• Oral questions</li> <li>• Demonstration</li> <li>• Third party report</li> <li>• Observation</li> <li>• Written tests</li> </ul>

4. Complete crop establishment	<ul style="list-style-type: none"> <li>• Farm records (types, uses and qualities)</li> <li>• Environmental management</li> <li>• Planting tools, equipment and machines (cleaning, servicing and storage.)</li> </ul>	<ul style="list-style-type: none"> <li>• Oral questions</li> <li>• Demonstration</li> <li>• Third party report</li> <li>• Observation</li> <li>• Written tests</li> </ul>
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### **Suggested methods of instructions**

- Practical demonstration of tasks by trainer.
- Practice by trainees.
- Discussions
- Questions & answers
- Observations, comments and corrections by trainers.
- Instructor led facilitation of theory.

### **Recommended Resources for 25 Trainees:**

- Workplace policy manual
- Planting manuals.
- National Environmental Management Authority (NEMA) regulations
- Soil analysis reports
- Farm power
- Machine/equipment manufacturer's specifications and instructions.
- Environmental Management and Coordination Act (EMCA) 2015
- A piece of arable land depending on the number of trainees
- Tools and equipment:
  - Fertilizer applicators
  - Fork jembe
  - Harrows
  - Jembe
  - Mattock
  - Ox-drawn plough
  - Panga
  - Planters
  - Ploughs
  - PPEs
  - Rake
  - Shallow weeder
  - Slasher

- Soil auger
- Spade
- Tape measure
- Tractor and trailer
- Weighing scale
- Wheelbarrow
- Materials:
  - Chemicals