

## PRODUCTION OF CUT FLOWERS

**ISCED UNIT CODE:** 0812 451 04A

**TVETCDACC UNIT CODE:** HO/CU/HP/CR/04/4/MA

**Unit duration:** 150 Hours

### Relationship to Occupational Standards

This unit addresses the Unit of Competency: **Produce cut flowers**

### Unit Description

This unit specifies the competencies required to produce ornamental plants. It involves establish cut flowers nursery, establishing cut flowers, managing cut flowers and performing cut flowers post-harvest practices.

### Summary of Learning Outcomes

SNO	Learning Outcome	Duration (Hours)
1.	Establish cut flowers nursery	30
2.	Establish cut flowers	40
3.	Manage cut flowers	40
4.	Perform cut flowers post-harvest practices	40

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1. Establish cut flowers nursery	<b>Theory</b> 1.1 Nursery site selection 1.1.1 Definition of cut flowers 1.1.2 Importance of nursery site selection 1.1.3 Factors considered when siting a nursery 1.1.4 Tools, equipment and materials used 1.1.4.1 Panga	<ul style="list-style-type: none"><li>• Written tests</li><li>• Reflection papers</li><li>• Projects</li><li>• Interviews/ Oral questions</li><li>• Individual/group assignments</li><li>• Practicals</li></ul>

	<p>1.1.4.2 Jembe 1.1.4.3 Slashers 1.1.4.4 Rake 1.1.4.5 Seeds 1.1.4.6 Splits 1.1.4.7 Suckers</p> <p>1.2 Nursery preparation 1.3 Planting seeds in a nursery 1.4 Nursery management practices 1.4.1 Mulching 1.4.2 Shading 1.4.3 Hardening off 1.4.4 Watering 1.4.5 Fertilizer application 1.4.6 Pest and diseases control 1.4.7 Pricking out</p> <p><b>Practice</b> 1.5 Carry out a nursery bed preparation and planting 1.6 Carry out nursery bed management practices</p>	
2. Establish cut flowers	<p><b>Theory</b> 2.1 Preparation of the land 2.2 Planting of seedlings 2.3 Field management practices</p> <p><b>Practice</b> 2.4 Carry out land preparation using various methods. 2.5 Carry out planting of seedlings 2.6 Carry out field management practices</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ Oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
3. Manage cut flowers	<p><b>Theory</b> 3.1 Field management practices 3.1.1 Gapping 3.1.2 Thinning 3.1.3 Fertilizer application 3.1.4 Pest and disease control 3.1.4.1 Causal agent 3.1.4.2 Signs and symptoms 3.1.5 Irrigation 3.1.6 Mulching 3.2 Harvesting of cut flowers</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ Oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>

	3.3 Management of wastes <b>Practice</b> 3.4 Carry out management practices using various methods 3.5 Carry out harvesting of cut flowers 3.6 Carry out management of waste	
4. Perform cut flowers post-harvest practices	<b>Theory</b> 4.1 Post-harvest practices 4.2 Examples of post-harvest practices 4.2.1 Cooling 4.2.2 Freezing 4.2.3 Drying 4.2.4 Grading 4.2.5 Sorting 4.2.6 Packaging 4.2.7 Storage 4.2.8 Transportation 4.3 Marketing techniques 4.3.1 Online marketing 4.3.2 Influencer marketing 4.3.3 Public relation 4.4 Management of wastes <b>Practice</b> 4.5 Carry out post-harvest practices using various methods 4.6 Carry out the management of waste	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ Oral questions</li> <li>• Workshop reports</li> <li>• Individual/group assignments</li> </ul> <b>Practicals</b>

### Suggested Methods of Instruction

- Role playing
- Group discussion
- Direct instruction
- Role playing
- Group discussion
- Direct instruction
- Questionnaires
- Interviews
- Experiment
- Survey
- Observation

### Recommended Resources for 25 Trainees

General Resources	Tools and Equipment	Materials and Supplies
• Source of water	• 25 Spray pumps	• Seeds
• Gutters	• 25 Watering cans	• 25 Suckers
• 25 Bucket	• 25 Hose pipes	• Seedlings
• 25 Shears	• 25 Plough	• 25 Cuttings
• 25 Soil augur	• 25 Harrows	• 25 Tubers
• 25 Panga	• 25 Ridgers	• 25 Tissue culture
• 25 Hammer	• 25 Boom sprayer	• 25 Buds
• 25 Saw	• 25 Pruning saw	• 25 Corms
• 10 Flow meters	• 25 Wire strainer	• 25 Corms Pesticides
• 10 Pumps	• 25 Traps	• Fertilizers
• 10 Sprinkler	• 25 Pipe sprinklers	• 25 Stationery
• 25 Dibbler	• 25 Scouting flags	• Manures
	• 25 Storage tanks	• 25 Ropes
	• 25 Tractors	• 25 Nets
	• 25 Grading shed	• 25 Papers
	• 25 Bud count square	• 25 Fencing wire
	• 25 Meteorological equipment	• 25 Staking sticks
	• 25 Hoes	• 25 Nails
	• 25 Machetes	25 Herbicides
	• 25 Secateurs	• Seeds