

HARVEST THE CROP

ISCED UNIT CODE: 0811 351 05B

UNIT CODE: AGR/OS/EXT/CR/03/4/B

UNIT DESCRIPTION

This unit specifies the competencies required to harvest a crop. It includes preparing to harvest, harvesting, caring out post-harvesting operations, evaluation of crop produce, forage conservation, and complete crop harvesting

ELEMENTS AND PERFORMANCE CRITERIA

| ELEMENT These describe the key outcomes which make up workplace function (to be stated in active voice) | PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements (to be stated in passive voice) <i>Bold and italicized terms are elaborated in the Range</i> |
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| 1. Prepare to harvest the crop | 1.1 Maturity of the crop is determined based on the <i>maturity indices</i> of the crop 1.2 <i>Tools, equipment, materials and machines</i> are assembled according to the crop 1.3 Store place is prepared according to <i>food safety practices</i> . |
| 2. Harvest the crop | 2.1 <i>Harvesting</i> is done timely according to the crop type. 2.2 Harvested produce is packed well based on the crop type 2.3 The packed produce is assembled at the collection point or the store according to the crop type and work policy |
| 3. Carry out post-harvesting operations | 3.1 Produce is cleaned according to GAP. 3.2 Sorting of produce is carried out depending on the crop type. 3.3 Grading is done according to the crop's <i>grading criteria</i> . 3.4 Produce is weighed and packaged according to the type of crop 3.5 Produce is treated for preservation based on GAP 3.6 Produce is correctly stored depending on the type of the produce and stores management procedure. |

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| 4. Evaluate crop produce | <p>4.1 The quality of the crop produce is evaluated according to the <i>crop quality parameters</i></p> <p>4.2 The quantity of the crop produce is evaluated based on the crop yield parameters</p> |
| 5. Conserve forage | <p>5.1 Forage conservation method is chosen according to the fodder available and farm policy</p> <p>5.2 Materials are prepared for preservation depending on the method chosen</p> <p>5.3 Tools/equipment/machines are identified according to method chosen</p> <p>5.4 The forage is properly preserved depending on the method chosen</p> |
| 6. Complete crop harvesting | <p>6.1 Waste and recyclable materials are collected and sorted according to <i>workplace policy</i></p> <p>6.2 Tools are cleaned according to the manufacturer's instructions</p> <p>6.3 Equipment and machines are maintained according to workplace procedures</p> <p>6.4 Tools/equipment/machines are stored according to the manufacturer's manual and workplace policy</p> <p>6.5 Proper records of the harvesting activities are kept as per the work place policy.</p> <p>6.6 Unused materials are stored as per the manufacturer's instructions and workplace policy.</p> |

RANGE

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 |
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| 1. Tool, equipment, materials and machines May include but are not limited to: | <ul style="list-style-type: none">• Tools:<ul style="list-style-type: none">• Fork• Jembe• Hoe• Knives• Panga• Sickle• Wheelbarrow• Equipment<ul style="list-style-type: none">• Weighing Balances• Materials:<ul style="list-style-type: none">• Grading tables Baskets• Labeled Crates/cartons• Sacks/bags• Twines• Stationeries• Litter• bins• Machinery:<ul style="list-style-type: none">• Baler• Combine harvesters• Forage harvester• Mowers• Potato harvesters• Tractor• Air-conditioned vans |
| 2. Maturity indices May include but are not limited to: | <ul style="list-style-type: none">• Change of colour• Size of the produce• Hardness of the fruit or tuber• Moisture content |
| 3. Food safety practice May include but are not limited to: | <ul style="list-style-type: none">• Dampness• Aeration• Contamination• Physical injuries to the produce |

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| 4. Harvesting May include but are not limited to: | <ul style="list-style-type: none"> • Picking • Plucking • Digging out • Threshing • Mowing • Combine harvesting • Cutting |
| 5. Good Agricultural Practices (GAP) May include but are not limited to: | <ul style="list-style-type: none"> • Correct tools • Clean • Correct use of tools and equipment • Winnowing • Seed dressing • Chemical treatment • Safely measures applied |
| 6. Grading criteria May include but are not limited to: | <ul style="list-style-type: none"> • Size of the produce • Colour • Type of the produce • Shape • Breakages |
| 7. Crop quality parameters May include but are not limited to: | <ul style="list-style-type: none"> • Colour • Taste • Size • Texture • Shape • Moisture content • Presence of pests and disease causing organisms |
| 8. Forage conservation method May include but are not limited to: | <ul style="list-style-type: none"> • Silage making • Hay making • Standing hay |
| 9. Workplace policy May include but are not limited to: | <ul style="list-style-type: none"> • Stores management policy • Produce handling and transportation • Harvesting waste management policy • Produce sorting and grading policy |

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:

- Materials, tools, equipment and machines Handling
- Measurement
- Perceptual (visual, tactile)
- Post-harvest crop handling
- Grading and sorting
- Recording
- Tools, equipment and machines servicing and maintenance
- Use of personal protective equipment

Required Knowledge

The individual needs to demonstrate knowledge of:

- Basic machine operations
- Tools, equipment and materials used in harvesting
- Crop maturity indices
- Post-harvest crop pests and diseases and their management
- Harvesting methods
- Health, hygiene, safety and environment
- Post-harvest crop handling practices
- Stores management
- Farm Records

EVIDENCE GUIDE

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

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| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate: <ul style="list-style-type: none">1.1 Gathered materials/tools/equipment/machines correctly1.2 Observed laid down environmental workplace policy well1.3 Keenly Observed safety measures1.4 Timely determined the crop harvesting time and stage1.5 Packed harvested crop properly1.6 Stored harvested produce properly1.7 Preserved forage correctly1.8 Maintained tools, equipment and machines correctly1.9 Handled crop residues well1.10 Handled wastes safely |
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| | 1.11 Documented crop harvesting activities correctly |
| 2. Resource Implications for competence certification | <p>The following resources must be provided:</p> <p>2.1 Access to relevant workplace where assessment can take place</p> <p>2.2 Appropriately simulated environment where assessment can take place</p> <p>2.3 Materials relevant to the proposed activity or tasks</p> |
| 3. Methods of Assessment | <p>Competency in this unit may be assessed through:</p> <p>3.1 Observation</p> <p>3.2 Oral interview</p> <p>3.3 Written exam</p> <p>3.4 Third party report</p> |
| 4. Context of Assessment | Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 5. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |