

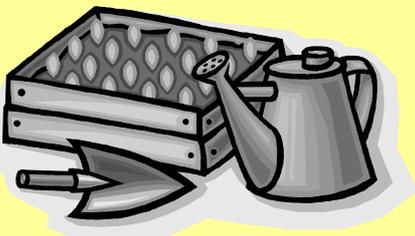


NQF Level: 2 US No: 116079

# Assessment Guide

## Primary Agriculture

# Monitor the establishment of a crop



Assessor: .....

Workplace / Company: .....

Commodity: ..... Date: .....

## Before we start...

This assessment guide contains all necessary activities and instructions that will enable the assessor and learner to gather evidence of the learner's competence as required by the unit standard. This guide was designed to be used by a trained and accredited assessor whom is registered to assess this specific unit standard as per the requirements of the AgriSETA ETQA.

Prior to the delivery of the program the facilitator and assessor must familiarise themselves with content of this guide, as well as the content of the relevant Learner Workbook.

The assessor, facilitator and learner must plan the assessment process together, in order to offer the learner the maximum support, and the opportunity to reflect competence.

The policies and procedures that are required during the application of this assessment are available on the website of the AgriSETA and should be strictly adhered to. The assessor must familiarise him/herself with this document before proceeding.

This guide provides step-by-step instructions for the assessment process of:

<b>Title:</b> Monitor the establishment of a crop	<b>US No:</b> 116079	<b>NQF Level:</b> 2	<b>Credits:</b> 4
---	----------------------	---------------------	-------------------

This unit standard is one of the building blocks in the qualification listed below. Please mark the qualification you are currently assessing, because that will be determined by the context of application:

Title	ID Number	NQF Level	Credits	Mark
National Certificate in Animal Production	48976	2	120	<input type="checkbox"/>
National Certificate in Mixed Farming Systems	48977	2	120	<input type="checkbox"/>
National Certificate in Plant Production	48975	2	120	<input type="checkbox"/>

Please mark the learning program you are enrolled in:

Are you enrolled in a:	Y	N
Learnership?	<input type="checkbox"/>	<input type="checkbox"/>
Skills Program?	<input type="checkbox"/>	<input type="checkbox"/>
Short Course?	<input type="checkbox"/>	<input type="checkbox"/>

### Note to Assessor:

If you are assessing this module as part of a full qualification or learnership, please ensure that you have familiarized yourself with the content of the qualification.

**1**

**SO 1 AC 1-4**

**Group research:**

Discussion

**Learner Guide: Page 11**

**Facilitator Guide: Page 11**

1. Go to the store and discuss with your facilitator the tools to be used for establishing the following crops:
  - 1.1 Orchard trees (young trees).
  - 1.2 Open field crops.(seeds, seedlings and potato tubers).
  - 1.3 Vegetable garden beds (seeds and seedlings).
  - 1.4 Tunnel crops (seeds seedlings and cuttings).
  - 1.5 Ornamental plants (seeds, seedlings and cuttings).

**Model Answer(s):**

*The answer will vary but should include:*

- Forks
- Spades & shovels
- Hoes
- Wheelbarrows
- Machinery: Row units, Box drills

**2**

**SO 1 AC 1-4**

**Practical assignment:**

**Learner Workbook: Page 12**

**Facilitator Guide: Page 11**

Select the tools you would need for establishing your specific crop and write a short motivation for each of the selected tools.

**Model Answer(s):**

*The answer will differ for different crops.*

**3****SO 1 AC 1-4****Practical Demonstration:****Learner Guide: Page 13****Facilitator Guide: Page 12**

Demonstrate to your facilitator that you can use tools selected for your crop correctly and effectively

**Model Answer(s):**

*The facilitator must draw up a checklist for the specific equipment demonstrated.*

**4****SO 1 AC 1-4****Practical Demonstration:****Learner Guide: Page 14****Facilitator Guide: Page 12**

Clean the tools you have used and return each to its proper place in the store and ask your facilitator to check,

**Model Answer(s):**

*All tools should be washed with water and then dried to prevent rust.*

*All fertilizer and seed must be removed and stored separately from machinery like planters etc.*



**Instructions to learner:**

Write a report

**Learner Guide: Page 22**

**Facilitator Guide: Page 15**

Write a short report on the prevailing environmental conditions that might have an effect on the establishment of your crop, considering the following points:

- Temperature during and after establishment
- Humidity during and after establishment
- Heavy rain during or after planting
- Strong winds during or after planting
- Can transplanting shock be a factor? If so, how can it be alleviated?

**Model Answer(s):**

*Report should include the following:*

*Avoid planting before heavy rainfall. Heavy rain not only increases the likelihood of damping off fungus developing, but also causes erosion of freshly prepared soils. Heavy rain can destroy the seedling habitat and wash away the newly planted seeds or plants.*

*Avoid planting seedlings on windy days, as the wind will dry out young seedling plants, exacerbating the effects of wind shock.*

*The day prior to transplanting seedlings into the soil the planting area should be thoroughly watered. Seedlings should be transplanted with as much soil as possible from the original site surrounding the roots. Remember that in a natural situation plant roots are never exposed to the wind, so it is important that as much of the original soil is kept with the seedling. The planting site for the crop should be watered once or twice before planting to allow the fertiliser and soil to settle. Excessive humidity can cause the development of a fungal disease known as 'damping off'. Similarly cold conditions may lead to germination failure or cold damage to seedlings.*

*Planting the wrong crops or during wrong time of the year is a common cause of crop failure. It is important to select the correct crop and cultivar for the particular time of year, and also the one best suited to your environment.*

*Different crops require different environmental conditions for optimal growth.*



# Summative Test and Attitude & Attribute Evaluation

**B**efore the knowledge test is undertaken, the learner must be reminded of what is expected from him / her in terms of summative and reflexive competence. Read and explain to the learner, the **Preparation for Your Final Assessment** section in the learner workbook. Learners and assessor should sign off this section to acknowledge that this step was completed.

Please set up a knowledge test from the questions given as a guideline to learners and supply each learner with a test sheet.

Supply each report with the following heading:

<b>Unit Standard:</b>	116079	<b>NQF Level:</b>	2
<b>Learner Name:</b>			

Questions	Model Answers
<p>1. Name the different hand tools that can be used for establishing a crop using the following planting material and explain why:</p> <ul style="list-style-type: none"> <li>• Seed</li> <li>• Seedlings</li> <li>• Rooted cuttings</li> <li>• Unrooted cuttings (like sweet potatoes)</li> </ul> <p>Tubers (potatoes and sweet potatoes) and bulbs (garlic, onion bulblets, flower bulbs Orchard trees.</p>	<p>The answer will vary but should include:</p> <ul style="list-style-type: none"> <li>• Forks</li> <li>• Spades &amp; shovels</li> <li>• Hoes</li> <li>• Wheelbarrows</li> <li>• Machinery: Row units, Box drills</li> </ul>
<p>2. Why is it necessary to clean ( and repair if required) tools after use and to store them correctly</p>	<ul style="list-style-type: none"> <li>• Agricultural tools and machinery is one of the biggest assets on the farm and very expensive to replace. When good maintenance and cleaning is regularly done, the lifespan of the equipment can be prolonged.</li> <li>• Cross contamination can also be prevented when using clean and well maintained equipment</li> <li>• Tools and equipment can only fulfil there purpose if the are in a good working condition.</li> </ul>

<p>3. Give reasons why planting material should be checked before planting</p>	<p>Economical effects will include:</p> <ul style="list-style-type: none"> <li>Material of poor quality will result in high replacement levels.</li> <li>Unsterilized material may cause the spread of diseases.</li> <li>One cannot expect a good quality yield when poor quality material is planted.</li> <li>The quality of the produce will be poor</li> <li>The seasonal window for planting is usually short and replacing plants may only be possible a year later.</li> <li>Ultimately a low percentage of take can be expected if poor quality material is used.</li> </ul>
<p>4. Explain the effects of environmental factors during the establishment of a crop</p>	<p>The planting environment will include the following:</p> <ul style="list-style-type: none"> <li>Temperatures must be favourable for planting as frost and high temperatures may scorch planting material.</li> <li>Humidity must not be low because a dry environment will cause material to wilt.</li> <li>Water must be available to the new plant as dry soil and roots will cause wilted or dead material.</li> </ul>
<p>5 Explain the Hygiene procedures you applied during the establishment of your crop</p>	<ul style="list-style-type: none"> <li>All equipment and tools should be clean and properly sterilized before starting with the propagation.</li> <li>Workers must wash their hands and preferably wear sterilized rubber gloves when working with growing media and propagation material.</li> <li>When using seed as propagation material, the seed can be sterilized or treated with fungicides.</li> </ul>

**My Notes ...**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

### Assessment Feedback Form

Comments / Remarks	
Feedback to learner on assessment and / or overall recommendations and action plan for competence:	
Feedback from learner to assessor:	
<b>Assessment Judgement</b> You have been found:  <input type="radio"/> Competent <input type="radio"/> Not yet competent in this unit standard	<b>Actions to follow:</b>  <input type="radio"/> Assessor report to ETQA <input type="radio"/> Learner results and attendance certification issued
<b>Learner's Signature:</b>	<b>Date:</b>
<b>Assessor's Signature:</b>	<b>Date:</b>
<b>Moderator's Signature:</b>	<b>Date:</b>