



NQF Level: 2 US No: 116115

# Assessment Guide

## Primary Agriculture

# Production systems in an agri-business



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.

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>	Define and understand production systems and production management		
<b>US No:</b>	<b>116115</b>	<b>NQF Level:</b>	<b>2</b>
		<b>Credits:</b>	<b>2</b>

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, 2,4**

**Instructions to learner: Individual activity**

Complete the following questions

**Learner Guide: Page 13    Facilitator Guide: Page 11**

Question 1: Fill in the missing words

**Model Answer(s):**

Production systems involve the use of a variety of PRODUCTION PRACTICES that are employed to produce a crop of the highest possible standard in terms of quantity, quality and size, in order to achieve PRODUCTION OBJECTIVES. Coordinating the production systems requires effective PRODUCTION MANAGEMENT.

Question 2: Model Answer

**In the table below are three concepts. In the right hand column are definitions. Match the concept with the correct definition writing the correct letter in the column provided.**

		Model Answer(s):
<b>A: Production practices</b>	The management of production systems and production practices.	<b>C</b>
<b>B: Production objectives</b>	The actions and processes carried out to achieve production objectives, such as fertilisation, irrigation, pest and disease control, pruning and harvest	<b>A</b>
<b>C: Production management</b>	Measured in term of yield (how much), export percentage, fruit size and external and internal quality	<b>B</b>

Question 3: Read the following case study and answer the questions that follow:

**Case Study:** *Dumisani Matjabe recently bought a farm. The previous owner used to farm with Soya beans and potatoes. Dumisani does not want to grow these crops and has decided to grow pumpkins, cabbage and green beans instead. He is sure that if he grows a good crop he will be able to sell his produce.*

What is the likely scenario that Dumisani can expect, based on the knowledge that she has of the market input relevant to her situation?

**Model Answer(s):**

Dumisani has not given any consideration to his market inputs; he does not know to whom he will be selling his produce. He is likely to make a financial loss.

1. What do you think his return on his investment is likely to be?

**Model Answer(s):**

It is possible that he will have no return on his investment.

Question 4: Consider the words below and sort them into the two categories in the table.

*Capital, Cattle, indigenous forest, management staff, mountain spring, seasonal labour for harvesting, seedlings, soil, grassland, water.*

Model Answer(s):	
Fixed resources	Mobile resources
Water	Capital
Mountain spring	Cattle
Indigenous forest	Management staff
Soil	Seasonal labour for harvesting
Grassland	Seedlings

## 2

SO 1 AC 1,2, 4

### Instructions to learner:

A group activity in which the learner investigate a farm situation for planning purposes.

**Learner Guide: Page 15**

**Facilitator Guide: Page 11**

The facilitator will provide the learners with a piece of land together with a plausible production plan. The learners use information resources and their experience to answer the following questions. It is not possible to provide model answers here.

**The assessor will have to work with the facilitator and/or farm manager to get the answers to the questions.**

### No answers supplied – specific to learner situation

QUESTION	YES	NO
1. Is the land of sufficient size to support the required plantings?		
2. Is the land located in the right climatic area to support the desired varieties?		
3. Is the land free from this crop's pests and diseases?		
4. Does the land have sufficient areas of the required soil type and quality?		
5. Does the land have a sufficient supply of high quality water (as required by the crop)?		
6. Is the land located close to sources of skilled and unskilled labour?		
7. Is the land situated at an appropriate and manageable distance from packing and transport facilities?		

Allow a group discussion to decide on and prepare a presentation to the rest of the group that answers and recommendations to all of these questions. Then evaluate the preparation as well as the presentation.

**Instructions to learner:** Apply the management principles of Plan, schedule, organise, implement, coordinate and monitor the building of an egg tower according to specifications.

**Learner Guide: Page 24**

**Facilitator Guide: Page 14**

The model answers provide a guideline to show the nature of the answer. The assessor should allow for individual variations, but the overall answers should show key indicators.

#### 1. Planning

**Model Answer(s):**

The answer must show a list of steps the group will take to move from a collection of resources to a constructed tower. The first step would probably be to draw up a design, the second step to compile a list of required resources for each step.

#### 2. Scheduling

**Model Answer(s):**

The schedule will show the time allocation for each step.

#### 3. Organising

**Model Answer(s):**

This would show how the resources are ready to be used as they are needed, plus the skills base within the group.

#### 4. Implementation

**Model Answer(s):**

The resources needed to complete the task. In some groups there may even be a contingency plan, just in case a part of the plan does not work.

#### 5. Coordination

**Model Answer(s):**

*This would show who does what*

#### 6. Monitoring

**Model Answer(s):**

This is the 'check point' where the group would stop to assess their progress and decide what must be changed, if things are not progressing according to plan

**4**

**SO 3 AC 1-4  
SO 4 AC 1-3**

**Instructions to learner: Individual exercise.**

Answer the following questions.

**Learner Guide: Page 33**

**Facilitator Guide: Page 16**

1. What do you think will happen if the person who is making decisions does so without gathering as many facts as possible?

**Model Answer(s):**

*The decision could be faulty, which could lead to any number of problems; within the production process, the staff, the environment, legal parameters, and/or financial.*

2. What do you think will happen if the person who is a team leader is constantly criticising and never seems to be pleased with anyone's efforts?

**Model Answer(s):**

*People are likely to develop disrespect for her/him, and build up resentment that would eventually, probably, interfere with their general attitude to work. An unhappy staff is not a stable staff.*

3. What are the 4 key ingredients for effective leadership?

**Model Answer(s):**

1. Give direction;
2. Align people;
3. Motivate and inspire people; and
4. Introduce change

4. What do you think will happen if there is bad communication between staff and management?

**Model Answer(s):**

*Ineffective communication leads to misunderstandings and incorrect assumptions; this could lead to instability within the team.*

5. One of the departments on the farm has been experiencing major problems with the staff. They are often late for work, and the standards of working have dropped. The staff are behind in their scheduled tasks and although the manager has threatened them, the staff have not been willing to improve. The problem seems to have started after the supervisor and a manager had an argument about overtime. What do you think could be done to rectify the situation?

**Model Answer(s):**

*The supervisor and manager should meet to address the issue that is between them, first. It seems the supervisor is a leader within his team and his attitude will cascade down into the team. Therefore, fixing the problem at the source may solve the problem. If necessary, the issue between the supervisor and manager can be dealt with through a disciplinary procedure.*

*If the situation is not resolved staff morale is going to continue to deteriorate until such time as it is almost impossible to address. A worst-case scenario would be to apply the disciplinary code within the department. Another option is to have a team-building programme for the team concerned to motivate them.*

6. What impact do you think it would have on the staff working on a farm if there was no human resources policy on a farm?

**Model Answer(s):**

*Human resource policies protect both employer and employee. Without guidelines in place the company could:*

- *Hire and fire people at will,*
- *Prevent people from being promoted,*
- *Not train staff,*
- *Not increase salaries,*
- *Not monitor performance against specified criterion,*
- *Act unethically, especially with respect do disciplinary procedures, and*
- *Not listen to staff issues.*

7. Looking back on the activity you did in small groups earlier in the course – the one where you made a tower – what have you learned during this session that would have made it easier to complete the activity?

**Model Answer(s):**

*There is no model answer for this question. It is intended to provide the learner with an opportunity to reflect on her/his own learning*

8. Consider your job on the farm from the point of view of both a leader and also reporting to someone else. What have you learned in this session that will help you become more effective in both these roles?

**Model Answer(s):**

*There is no model answer for this question. It is intended to provide the learner with an opportunity to reflect on her/his own learning*



**5**

**SO 4 AC1-4**

**Instructions to learner:**

Set goals and develop an action plan within a scenario provided.

**Learner Guide: Page 43**

**Facilitator Guide: Page 18**

You are going to participate in a group activity during which you will set goals and develop an action plan to achieve these goals. Your facilitator will give you a scenario such as the one below and in your group you will discuss this and record your application in the spaces provided below.

**Management's decision is: Increase the yield per hectare of \_\_\_\_\_ grown on the farm. Your current yield is \_\_\_\_\_.**

In your group, identify the key departments that have a role to play in achieving this goal.

**Model Answer(s):**

*There is no model answer for this question. The answer would depend on the scenario. The assessor must create a model answer based on the context of the scenario.*

Using the paper provided by the facilitator, use one page for every month and one page for every department. Identify the key tasks or responsibilities of each of these departments in order to achieve the identified goal.

For example, if this was in a citrus environment, the production process will have three or four primary or overall goals. The sub-systems will have their own goals, which are aligned with the overall goals. Some of these could be:

- Apply all nitrogen fertiliser applications by 30th July  
Departmental planning includes: stores must have the fertiliser in stock; staffs have to be available to perform the task; transport available to move fertiliser from stores to orchards.
- Girdle all trees older than 6 years by 25th August;  
Departmental planning includes: materials and equipment in good order, ready to use; staff available (how many trees per day in relation to staff available); trees must be identified.
- Apply first pest control sprays by 15th September and follow-up sprays six weeks later;  
Departmental planning includes: stores must have the pest spray and spray equipment on hand; staff has to be available to perform the task; transport available to move teams from orchard to orchard.
- Increase the frequency of irrigation applications from 1st October.  
Departmental planning includes: irrigation system in good repair; water must be available.







# 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 guide. 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>	116115	<b>NQF Level:</b>	2
<b>Learner Name:</b>			

Questions	Model Answers
1. What is the purpose of setting goals and objectives for an agri-business enterprise?	To define what must be done and how it will be achieved, to ensure that the right things are done in the right way at the right time – without this the business is unlikely to succeed.
2. Below is a list of managerial tasks. Provide a brief explanation for each of these tasks. I. Setting objectives II. Planning III. Scheduling IV. Organising V. Implementation VI. Coordination VII. Monitoring	Setting objectives: defines WHAT we want to achieve. Planning: to formulate a scheme, programme or method to accomplish a specific goal within a specified time frame with a specific purpose in mind. Scheduling: the timetable within which tasks will be performed, either repetitively or sequential. Organising: the structuring of activities in a coherent manner so that it flows. Implementation: ensuring the resources are available in order to do what has to be done, and that it is done. Coordination: making sure the manpower required is available and that everyone who is supposed to do something does do it. Monitoring: making sure that things stay on track by using control measures, feedback, adapting where necessary, and applying corrective action.

Questions	Model Answers
<p>3. In our own words, explain your understanding of production systems.</p>	<p>Production systems involve the use of a variety of production practices that are employed to produce a crop of the highest possible standard in terms of quantity, quality and size, in order to achieve production objectives. Coordinating the production systems requires effective production management.</p>
<p>4. List the key managerial skills for effective management and give a brief explanation of each.</p>	<p>Decision-making: anticipating the likely consequences of a course of action and selecting the most appropriate for a given set of circumstances.            Leadership: giving direction, aligning people, motivating and inspiring people, and introducing change.            Communication: giving feedback to a team about what they should do, why they are doing it, how they should do it, how well they should do it and how well they are doing it.            Motivation: helping people to be passionate about their work.            Delegation: sharing responsibilities and tasks.            Discipline: doing what is supposed to be done in the way that it should be done.            Human resource management:</p> <ul style="list-style-type: none"> <li>• Staff selection and recruitment;</li> <li>• Succession planning and career path development;</li> <li>• Staff training;</li> <li>• Setting remuneration policy;</li> <li>• Setting and monitoring performance management policy;</li> <li>• Ethics and disciplinary procedures; and</li> <li>• Industrial relations</li> </ul>
<p>5. In your own words, explain the term 'natural resource limitations'.</p>	<p>Natural resources cannot be replaced or increased and therefore a farm has to operate within what is available, ensuring that the resource is conserved.</p>
<p>6. Identify five production practices that would ensure that there is a minimum negative impact on the environment.</p>	<ul style="list-style-type: none"> <li>• Selecting varieties best suited to the environment and climate;</li> <li>• Using certified nursery material (in the case of trees and seedlings);</li> <li>• Using pesticides with minimum impact on non-target insects;</li> <li>• Minimising the use of soil tillage equipment; and</li> <li>• Accurate and targeted use of fertilisers</li> </ul>



### Assessment Feedback Form

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