



NQF Level: 1

US No: 13356

# Assessment Guide

## Primary Agriculture

# Assess the Influence of the Environment on Sustainable Livestock Production



Assessor: .....

Workplace / Company: .....

Class Group: ..... Date: .....

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agriculture

Department:  
Agriculture  
REPUBLIC OF SOUTH AFRICA



## 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, names Policies and Procedures for Assessment, 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>	Assess the influence of the environment on sustainable livestock production		
<b>US No:</b>	<b>13356</b>	<b>NQF Level:</b>	<b>1</b>
		<b>Credits:</b>	<b>4</b>

This unit standard is one of the building blocks in the qualifications 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	48970	1	120	
National Certificate in Mixed Farming Systems	48971	1	120	
National Certificate in Pant Production	48972	1	120	

Please mark the learning program the learners are enrolled in:

Are you assessing a:	Yes	No
Learnership?	<input type="checkbox"/>	<input type="checkbox"/>
Skills Program?	<input type="checkbox"/>	<input type="checkbox"/>
Short Course?	<input type="checkbox"/>	<input type="checkbox"/>

### Please Note:

This Unit Standard **13356** Assessment Guide must be read in conjunction with the generic Assessor Guide as prescribed and published by the AgriSETA.

### Note to Assessor:

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



## 1.1

SO 1 AC 1 - 4

### Instructions to Learner:

Groupwork (1), discussions (2) and individual work (3).

**Learner Workbook: Page 3**

**Facilitator Guide: Page 10**

### Brainstorm:

1. How do the following ecological factors influence the veld?

- a. Climate
- b. Soil
- c. Topography

### Model Answer(s):

1. a. All determine type of crop that will grow  
All determine sequence of pioneer and later species that are found in an area

### Model Answer(s):

- b. All could influence success or failure of invasive species  
Plants would be specifically adapted to specific conditions; i.e. more or less palatable or noxious, etc.

### Model Answer(s):

- c. Topography:
  - Steepness and length of slope influences the way in which animals (wild and domestic) forage and graze.
  - Water also normally occur at the base of the slope, causing animals to congregate there, thus trampling and overgrazing the grasses and plants in that area.
  - Plants near stream also stay green and palatable longer than those on slopes, once again encouraging overgrazing.
  - Different species of livestock prefer different gradient and positions in terms of topography. Large heavy animals such as cattle and horses, find it difficult to graze or move around steep gradients and slopes.
  - Cattle almost never use slopes with more than a 10% incline. Sheep and goats manage better on slopes between 10% and 30%

2. Discuss in class and make key notes for yourself:

Why must we consider the impact of ecological factors on the veld?

### Model Answer(s):

Determines vegetation and success of grazing animals

**3. Make a list:**

- a. What are the main types of veld?
- b. What are the differences between these veld types?
- c. What kinds of animals prefer to eat which type of veld?
- d. What type/s of veld are found in your area?

**Model Answer(s):**

- a. Main types: Sweet; Sour; Mixed

**Model Answer(s):**

- b. Differences:  
Sweetveld is palatable veld and sourveld is unpalatable veld; mixed veld contains both

**Model Answer(s):**

- c. Types of animals: All will eat sweet; none will eat sour; sheep & browsers will eat mixed

**Model Answer(s):**

- d. Type in area: Dependant on area

**My Notes ...**

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**2.1**

**SO 2 AC 1 - 5**

**Instructions to Learner:** Explain in your own words

**(Note to Assessor: See paragraphs 2.2 and 2.3 in the Learner Guide for guidelines to possible answers)**

**Learner Workbook: Page 5**

**Facilitator Guide: Page 11**

1. What is veld composition?

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2. Why do we consider veld composition in veld management?

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3. What are pioneer species?

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4. What are climax species?

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5. What do pioneer and climax species have to do with veld management?

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# 3.1

SO 1 - 4

### Instructions to Learner:

Speak to an expert and write notes for yourself.

Learner Workbook: Page 7

Facilitator Guide: Page 12

1. What kinds of domestic animals are suited to your area?

**Model Answer(s):**

None supplied due to differences in choice of animal & areas

2. Why are these animals suited to your area?

**Model Answer(s):**

None supplied due to differences in choice of animal & areas

3. What breed of this animal will be suited or most desirable?

**Model Answer(s):**

None supplied due to differences in choice of animal & areas

4. Why would this breed of animal be chosen?

**Model Answer(s):**

None supplied due to differences in choice of animal & areas

## 3.2

SO 3 AC 1 - 4

### Instructions to Learner:

Investigate

Learner Workbook: Page 8

Facilitator Guide: Page 12

1. Would it be possible to farm with different animals to the ones that are most suited to your area by including special supplementary feeds?

#### Model Answer(s):

Learner has to identify alternative species to those suitable

2. How will these animals affect the environment?

#### Model Answer(s):

Animals' effect: Probably detrimental, though not necessarily if managed properly

3. If you had no choice but to farm with this animal, how would you prevent that it damages the environment?

#### Model Answer(s):

Prevention: Erosion control; place preferential feed away from water source; supplement feed; rotate camps; isolate water sources



**4.1****SO 4 AC 1 - 5****Instructions to Learner:**

Research and discover

**Learner Workbook: Page 9****Facilitator Guide: Page 13****Choose an animal that you would like to farm with.**

1. What supplementary feeds can you give this animal?

**Model Answer(s):**

Check accuracy &amp; relevance in terms of animal mentioned

2. How and when will you give this animal these supplementary feeds?

**Model Answer(s):**

Check accuracy &amp; relevance in terms of animal mentioned

3. If you had to let this animal graze on pastures, what would the pasture contain?

**Model Answer(s):**

Check accuracy &amp; relevance in terms of animal mentioned



**5.1**  
**SO 5 AC 1 - 6**

**Instructions to Learner:**  
A case study

**Learner Workbook: Page 10      Facilitator Guide: Page 14 - 15**

**What benefit would cattle have from the following creatures in their environment:**

- 1. The white Ibis ("Bosluisvoël")

**Model Answer(s):**  
White Ibis rids cattle of ticks & other superficial parasites

- 2. The Secretary bird

**Model Answer(s):**  
Secretary bird removes dangers such as snakes

**My Notes ...**

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**5.2**  
SO 5 AC 1 - 6

**Instructions to Learner:**

Make a list

**Learner Workbook: Page 11**

**Facilitator Guide: Page 14 - 15**

1. Which organisms and creatures can harm pigs?

**Model Answer(s):**

Learner might not identify or obtain information on all, but they can include the list below. Learner to reflect expertise of an SME and show own research.  
Mange; Lice; Greasy pig disease; Diamond skin disease; Roundworms; Tapeworm; (measles); Fly damage; Lameness; Abscesses; Fever; Heatstroke; Salt poisoning; Diarrhoea; Pneumonia

2. What do these organisms do to the pigs?

**Model Answer(s):**

Learner to investigate each cause & effect

3. How would you control these organisms if you had to farm with pigs?

**Model Answer(s):**

Control: Learner to investigate



## 5.3

SO 5 AC 1 - 6

### Instructions to Learner:

Have a group discussion

Learner Workbook: Page 12

Facilitator Guide: Page 14 - 15

As a group of small farmers, you notice that your chickens are dying and ill. You have heard of bird flu and when you read up about the disease, most of the symptoms are similar to those of your chickens.

1. What are you supposed to do if you suspect that your chickens have bird flu?

#### Model Answer(s):

You should notify the state veterinarian or police when you detect any signs of these types of diseases in your animals! They will then investigate and if necessary destroy the animal making sure it is tested.

2. Who must you speak to about this?

#### Model Answer(s):

Who to speak to: the state veterinarian or police; probably local community & farmers if absolutely certain of diagnosis

### My Notes ...

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**Assessment Feedback Form**

<b>Comments / Remarks</b>	
<b>Feedback to learner on assessment:</b>	
<b>Feedback from learner to assessor:</b>	
<b>Learner's Signature:</b>	<b>Date:</b>
<b>Assessor's Signature:</b>	<b>Date:</b>

# 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>	13356	<b>NQF Level:</b>	1
<b>Learner Name:</b>			

Questions	Key points	Competent / NYC	Comments
1. Assess the veld in your area	<ul style="list-style-type: none"> <li>• Correct assessment</li> </ul>		
2. Which environmental factors influence the veld in your area?	<ul style="list-style-type: none"> <li>• ID all relevant environmental factors</li> </ul>		
3. How do these environmental factors influence the veld in your area?	<ul style="list-style-type: none"> <li>• Relate to all environmental factors' impact on sustainability of crop &amp; relevance of grazing animal</li> </ul>		
4. Recall some activities that you have participated in and indicate how they managed the environmental factors that influence the veld in your area	<ul style="list-style-type: none"> <li>• Any crop rotation; feed rotation; placing of feed away from water sources</li> </ul>		
5. What types of animals would you be able to farm with here?	<ul style="list-style-type: none"> <li>• Correct ID</li> </ul>		
6. What made you decide that you could farm with these animals in this area after assessing the veld?	<ul style="list-style-type: none"> <li>• Assessment of veldt</li> <li>• Assessment of sustainability</li> <li>• Assessment of viability of animal</li> </ul>		

7. What would these animals eat and what wouldn't they eat that is found in the veld in your area?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
8. What would these animals eat first?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
9. Which plants in this area could poison these animals?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
10. How will you prevent the animals from being poisoned by these plants?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
11. What types of animals would you be able to farm with if you could feed them supplementary feeds?	<ul style="list-style-type: none"> <li>• Possibly most that can adapt to weather patterns</li> </ul>		
12. Investigate what supplementary feeds are available to give them?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
13. Investigate when do you have to give them these supplementary feeds?	<ul style="list-style-type: none"> <li>• Correct for specific animal &amp; time of year &amp; type of natural grazing</li> </ul>		
14. Interview a livestock farmer in the area and ask them: How they farm sustainably with these animals	<ul style="list-style-type: none"> <li>• Manage veldt</li> <li>• Rotate fields</li> <li>• Rotate camps</li> <li>• Fertilise soils</li> <li>• Rest soils</li> <li>• Prevent compaction as much as possible</li> <li>• Don't overgraze</li> <li>• Restrict access of livestock to water source</li> </ul>		
15. What creatures and organisms could harm these animals?	<ul style="list-style-type: none"> <li>• Correct for specific animal</li> </ul>		
16. Why are these organisms a problem?	<ul style="list-style-type: none"> <li>• Parasitic</li> <li>• Disease causing</li> <li>• Reduces quality of animal products</li> </ul>		
17. What can you do against these organisms?	<ul style="list-style-type: none"> <li>• Inoculations</li> <li>• Dips</li> <li>• Veldt management</li> <li>• Appropriate preventative measures</li> <li>• Quarantine of animals with it</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>